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Louisville, Kentucky.

VOL. 8:

NOV., 1856.

NO. 11.

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#### AGRONOMY;

OR THE SCIENCE WHICH RELATES TO THE CONSTITUENT PARTS AND PHYSICAL PROPERTIES OF THE SOIL, &c.—NO. 5.

##### LIME.

Lime is one of the most abundant substances in nature; it forms whole mountain chains, and together with other earths and metallic oxides, constitutes a great number of minerals. It also exists in large quantities in the bodies of animals, forming the principal ingredient of bones and shells. It likewise forms a constituent part of all vegetables; at all events, it is invariably found in their ashes, and it exists in solution in almost all natural waters.

Lime, till lately, has been regarded as an elementary substance; modern experiments and observations have shown that it is a compound. It is composed, in fact, of a peculiar metal called calcium and oxygen. The frequent occurrence of lime in the bodies of animals, the numerous impressions and petrifications found in calcareous rocks, the evidence by which it is proved that this lime is derived from testaceous animals, and lastly, the numerous reasons which induce us to believe that organic bodies produce lime—all these considerations, taken collective-

ly, have led naturalists to suppose that lime is a product of organic nature. But the opinion is contradicted by the existence of the substance in question in primitive rocks, and at elevations where neither petrifications nor impressions of organic bodies are found. Lime belongs to the class of alkaline earths, and its properties seem to bear a close resemblance to those of the alkalies. It has a strong tendency to combine with acids, and as it occurs elsewhere, we always find it in combination with one or the other of those bodies, except, indeed, in the craters of volcanoes, in which we occasionally meet with lime in a pure state, being robbed of the carbonic acid by the action of heat. The acids with which it is most frequently combined, are the carbonic and sulphuric, though we occasionally, but not so often, find it united with the phosphoric, muriatic, boracic, and nitric acids.

*Carbonate of Lime*, also known by the name of *crude lime*, is the base of lime-stone and chalk, and also forms a constituent of other minerals. It exists in marl in combination with clay, and in many soils it is found mixed more or less abundantly with clay and sand. It can be separated from every mixture, and by means of certain artificial processes, may be exhibited in a state of purity.

Pure carbonate of lime is a light, white, insipid and inodorous powder. According to the most accurate analysis, it is composed of 56 parts in a 100 of pure lime, 40 parts of carbonic acid and 4 parts of water. This latter portion is essential to it, and forms a part of the fundamental constitution, and is not evaporated by a moderate heat; carbonate of lime ceases to be such before it parts with the water. This fluid is not contained by it in a liquid form but as a solid, and in a state of crystalization.

When calcareous earth is dissolved in water, it adheres to the vessel which contains it and forms a crust or collects in masses, becomes agglomerated, and falls into various shapes. When a solution of lime in an excess of carbonic acid is boiled, the acid escapes yet more rapidly, and this may account for the fact that spring water, when boiled, becomes turbid and deposits a sediment, which forms a crust around the vessel. This crust is formed by the precipitated carbonate of lime, although many uneducated persons take it for nitre.

Carbonate of lime undergoes no change, when exposed to the action of moderate heat, except that it parts with some or all of the water which adheres to it, and becomes drier. But when exposed to a violent heat it loses the whole of the water, as well as the carbonic acid, becomes caustic, and acquires alkaline properties. In this state only, lime can be regarded as chemically pure, and it is then called calcined or quick-lime. This substance has in all ages and in all countries been used for the purpose of building. We shall not here attempt to describe the preparation of lime on a large scale, but content ourselves with considering its physical and chemical properties, in order to be enabled to account for all the remarkable phenomena it produces, as well as the effects when it is employed as a manure and as a mortar.

Quick or calcined lime has an alkaline, caustic and very disagreeable taste, and like the alkalies, it possesses the property of alternating vegetable colors. When fragments of lime in this state are moistened with water they absorb a considerable quantity of that fluid and yet remain dry. A disengagement of heat is soon observed, which gradually increases, and finally the fragments split, burst asunder, and fall into a very white and light powder, which is soft and dry to the touch. The degree of heat produced by this combination of lime with water sometimes exceeds that of boiling water, and when a considerable quantity of lime is slaked in a dark place, light is frequently emitted.

Even when lime is united with a quantity of water equal to the fourth part of its whole weight, it does not then become moistened, but absorbs and solidifies the whole of the fluid, and its own weight is proportionably increased. This solidification of water affords an explanation of the temperature always attendant on the operation of slaking lime, and formerly all sorts of imaginary causes were assigned to account for this phenomena. The water absorbed by the lime passes from its liquid to its solid state, and the caloric to which this liquid doubtless

owes its fluidity, is set at liberty and escapes. The water which has entered into combination with the lime passes into a solid state, and can only be separated from it when that substance is heated to ignition.

Lime which has been calcined, but not slaked, likewise becomes changed by exposure to the air; its fragments fall to powder more or less quickly in proportion to the degree of humidity contained in the surrounding atmosphere; it absorbs the moisture of the air, and thus becomes slaked of itself, often exhibiting a perceptible increase of temperature. But it also becomes changed in another way, gradually losing its causticity and taste, and becoming unfit to be made into mortar. It also absorbs carbonic acid from the air, and thus gradually repasses to the state of a carbonate, so that it cannot be restored to the former condition unless it be calcined afresh. Calcined lime easily combines with sulphur, producing various phenomena, according to the manner in which the combination is effected. When caustic or quick-lime in a state of powder is mixed with powdered sulphur, and this combination is heated to redness, it becomes brown, and the two substances unite. The product which is called *sulphuret of lime*, or liver of sulphur, has no smell, and is simply a compound of lime and sulphur. When it is exposed to the air, or moistened with water, the peculiar fetid odor of sulphureted hydrogen is given off, part of the sulphur decomposes the water, the hydrogen of the latter dissolves a portion of the sulphur and produces an acid, which immediately unites with the lime, and thus the *hydro-sulphuret of lime* is formed.

As far as present experience goes, it does not appear that lime combines with pure hydrogen, nitrogen or carbon, but there is no doubt of its being able to unite with these substances when they are combined together, or of its capability of uniting with carburated hydrogen and the compounds of carbon, nitrogen and hydrogen. This fact shows us the reason that organized bodies are attacked and destroyed by quick-lime. When such bodies are placed in contact with quick-lime, they lose their cohesion and color, and are reduced to a friable mass. Carcasses covered with lime are rapidly decomposed without exhaling those noxious vapors which accompany their putrefaction under other circumstances. It is on this account that quick lime is placed in the coffin of the bodies of those individuals who have died of contagious diseases. Even living organized bodies, as tender plants and seeds, insects and their larvae, are

also attacked and rapidly destroyed by quick lime.

These phenomena, which are produced by lime as well as by the alkalis, sufficiently prove that it has an affinity for the elements of which organized bodies are composed, viz: hydrogen, carbon and nitrogen. As it is impossible to believe that a substance which acts with so much energy upon organic bodies, can be destitute of affinity for their elements, we are rather led to conclude that it tends to combine with some one or more of these elements, which are united in all organic bodies in certain definite proportions and that by its combination it destroys the equilibrium of the whole mixture.

One of the most remarkable properties of lime—a property which renders it so eminently useful as a building material—is, that it hardens when mixed with certain stony substances and made into a fluid paste, and forms with them a matter which possesses the firmness of rock. Mortar made of sand and slaked lime soon dries when exposed to the air. This composition not only possesses great cohesion in itself, but also adheres firmly to other stony substances, and serves to unite them together. This cohesive power arises from the strong affinity which exists between silica and lime. A mixture of lime and water presents numerous points of contact to sand, stones and other kinds of hard substances which are chiefly composed of silica, and thus its cohesion with them is strengthened, the water evaporated and by so doing still further augments the cohesion; finally the lime absorbs the carbonic acid from the air, and thus undergoes a sort of crystallization, which increases to a greater extent both its own cohesion and its adhesion to bodies of a silicious nature.

Lime cannot, even by the most intense heat, be made to fuse, unless it is mixed with other substances; too great a degree of heat does however produce a certain change in its properties, rendering it insoluble in water and unfit for making mortar. This tendency is well known to those who have the management of lime-kilns and they cautiously endeavor to guard against it. When it has undergone this alteration, it is called *dead* or *burnt lime*. This condition is that of a species of vitrification or agglomeration; the cohesion of the integral parts is augmented, and the affinity for water is greatly diminished by this change. But lime may be completely fused when mixed with silica.

When calcined lime combines with acids, it loses the causticity and alkaline properties and the acids themselves lose their distinguished

characteristics. The effect is the same whether it be the carbonate or the calcined lime which combines with the acids. In either case the resulting compound is a simple combination of lime with the acids employed.

The neutral salts which lime forms by its combination with acids, exhibit different properties with the acids by which they were produced; they are, also, sensibly different from those which the same acids form with other earths. We shall not here attempt to enter into a minute examination of more than one of those salts, viz: the sulphate of lime or gypsum, commonly called plaster.

Among the calcareous minerals essentially composed of carbonate of lime, we distinguish the following:

1st. *Calcareous spar*, is composed entirely of carbonate of lime; it is found in crystals or in masses in the interior of strata, and not unfrequently serves as a matrix for metallic ores. Its crystals vary between the forms of the prism, the pyramid, the rhomboid, &c. Calcareous spar is more or less transparent, colorless, and breaks into rhomboidal fragments. The transparent rhomboidal crystals, crystals of calc-spar having the property of multiplying the objects seen through them.

2d. *Limestone*.—Whole mountain chains are found composed of this rock; it is extracted in order to be calcined and converted into lime, a purpose to which it is peculiarly adapted. It is hard and usually of a greyish hue, inclined to red or yellow; occasionally it is found variously colored. The grey variety is the best. It is, moreover, distinguished by the form of its fracture; some kinds of limestone having an earthy, some a scally, and others a schistous fracture. Limestone always exhibits a greater or less degree of hardness, but is never sufficiently hard to emit sparks on being struck with steel. It does not naturally possess either lustre or transparency, but sometimes acquires the former from polishing. Limestone often exhibits impressions and petrifications of testaceous animals; sometimes it is impregnated with bituminous substances, and in that case, on its fragments being rubbed together, it emits a fetid odor similar to that of garlic. This variety is called *stinking stone* or *swine stone*, or *lapis swillus*.

Marble is a species of concrete limestone, which is only distinguished from the others by the small admixture of foreign bodies which it contains, by being considerably harder and finer grained, and by the variety of its hues, which latter often give it a very beautiful appearance.

3d. *Chalk*.—This is a species of concrete lime, of different degrees of hardness, meagre to the touch, slightly inclined to stain or soil whatever it comes in contact with, and capable of being easily reduced to powder. It is of a white or yellowish-white color, and derives its name from the isle of Crete or Candia in which large quantities of very fine chalk are found. It may also be procured from other countries in some of which there are large hills composed entirely of it—as, for example in England, Denmark, France, &c. Chalk may be employed in the manufacture of lime and is also in daily use for various other purposes. There are other fossils, which are often called by the same name, but which, nevertheless, must not be confounded with this substance. Spanish chalk is a species of steallite, which belongs to the class of magnesias. Black chalk is of the schistous species.

4th. *Pulverulent Lime*.—In hills, plains and low grounds, a species of friable white earth is often found, bordering in hue, more or less, on a yellow or grey, and which is principally composed of carbonate of lime. It is meager to the touch, possesses a small degree of consistency, and, when impregnated with water, does not form a concrete mass. We call it pulverulent or earthy lime, but in many places it is known as *marly lime* and is sometimes denominated *marl*. It consists of too great a portion of lime, containing at least ninety parts of it in a hundred to admit of its being classed among marls. It is moulded into tiles in order to be reduced to quick lime by calcination, but it may be advantageously employed as a manure without being submitted to the action of fire—and the more so, as the simple action of the atmosphere is sufficient to reduce it to powder. It is therefore of great importance to the agriculturist, as in all probability, its origin is the same as that we are about to mention.

5th. *Lamellated or Shell Lime*.—This variety is sometimes found in mountains, but more frequently in plains, covered by a thick layer of marshy earth. On the surface there is usually a layer of shells, which, as we penetrate deeper, exfoliate into flakes; underneath there is a layer of loose friable lime, and further down still, a species of lime almost as hard as stone. It is here easily perceptible that this substance has been formed from the remnants of testaceous animals, and that it has gradually become hardened into stone.

6th. *Stalactites and calcareous crystalized concretions*.—These varieties have been produced by the droppings of water, which have dissolved

a great deal of carbonate of lime by means of the carbonic acid which they contain. In proportion as this acid has become evaporated, the lime has been deposited and hardened on itself, or on any other bodies which it met with in its descent. Stalactites of various remarkable forms are frequently found in grottoes, and especially in the numerous caves in Kentucky.

*Gypsum, or Sulphate of Lime* is a substance of great importance to the farmer and will form the subject under our present head for our next number.

[Written for the Valley Farmer.]

#### Locust and Thorn Apple for Hedging.

MESSRS EDITORS:—There has been serious objections urged against the Maclura as a hedge plant. Why would not the Honey Locust or Thorn Apple tree answer the purpose? The honey locust will flourish on any soil, while the Maclura requires much nursing, and will not grow at all on wet clay. One of the objections against the Maclura, is its prodigious growth after it attains the age of six or eight years. The thorn apple tree, never under any circumstances, grows more than ten or twelve feet high, and I suppose, in a hedge, it would need little or no trimming after it had thickened up. The honey locust being a forest tree, would, I apprehend, like the Maclura, need a great deal of trimming to keep it down.

I intend to try the thorn apple, but before I do so, I would like to avail myself of any information you or your readers may be possessed of on the subject.

Yours &c.,

A.

REMARKS.—The honey locust has been repeatedly tried as a hedge plant. It requires more labor to plant and rear it than the Maclura, and it does not form so permanent and close a hedge, and for this reason has been abandoned by those who have tried both, and who give a decided preference to the latter.

The thorn apple has also been tried in the United States, as well as all the thorn family, including those of which the fine hedges in England are made. None of these are adapted to stand our long, dry summers. This whole family of plants are "tap-rooted," and throw out but few lateral roots. The close, dense head of foliage forms a kind of roof which turns the water off so far from the roots that the plants starve out in a few years. Not so with the Maclura, which throws out an abundance of laterals.

The Climate of England is remarkably humid, and well adapted to the perfect development of the thorn hedges, which grow very beautiful in that country.



### FAIRS.

As the past month has been the season of the farmers' annual festivals throughout the country, we have endeavored to attend as many of them as possible, and such as promised to afford the most profitable subjects for investigation.

In our notes on the fairs we shall not attempt to give a general account of all we saw, but shall confine our observations to such new and useful things as we think will prove most interesting and valuable to our readers.

#### OHIO STATE FAIR.

The Ohio State Fair came off at Cleveland, on the 23d, 24th, 25th and 26th days of September. As we desired to attend the American Pomological Convention at Rochester, New York, which assembled on the 24th, we were compelled to leave Cleveland on the night of the 23d, before the arrangement of the articles of the fair were fully complete. We however had an opportunity to view all of the stock and most of the machinery and implements that were exhibited.

The show of stock, taken together, was extensive, and many of the animals were fine. There were over three hundred enclosed stalls, all of which were full, and in the department for sheep and swine, each stall contained a number of animals. Among the horses the prevailing taste is evidently in favor of the Morgan stock; of these there were some noble animals. The Messrs. Ladd, of Richmond, Ohio, had 17 head of young horses and colts, mostly by Champion Black Hawk. There were a large number of cattle, including some good specimens of Short-horns, but the Devons were most numerous. Of sheep, all the popular breeds were represented, and the character of the animals were creditable to the breeders. But of swine, Ohio should have made a better show, particularly of pork-making breeds. Of Suffolks—the gentleman's pig—there was a splendid show, both in numbers and in the quality of the animals.

The show of Agricultural Implements was not extensive. A large amount of these manufactured by Messrs. De Witt & Howell, of Cleveland, expressly for the fair, were destroyed by fire with their factory, a short time since.—There were quite a variety of Mowers and Reapers on the ground, including some new candidates for public favor, but we saw none that we think superior to the Manny machine, manufactured by Messrs. De Witt & Howell. There were a number of portable steam engines in operation, employed in propelling various kinds of machinery; five of these engines were designed for agricultural purposes, for which they were well adapted. We noticed two new and

improved machines, which promise to be important acquisitions. One was a brick making machine, very simple in its construction and operation, and not exceeding four feet square, run by one horse. It grinds the clay, and by the same process fills and presses it into the moulds and discharges the brick outside, ready to be carried off to the drying floor, at the rate of 20,000 in ten hours. Any further information respecting this machine can be obtained by addressing Dane & Co., Painesville Lake Co., Ohio. The other machine was very similar in its operation, and was for the moulding of drain tile, which are coming into extensive use among farmers where the benefits of land draining are best understood and duly appreciated. This machine will run off from 350 to 400 rods of tile in a day. F. M. Mattice, of Buffalo, N. Y., is agent.

The most attractive feature of the exhibition was a large glass case of *Brook Trout*, from the pools and streams of Doctors Garlic & Ackley, of which we gave some account in our August number. These consisted of the two parent fish, *Triton* and *Naiad Queen*, and a large number of their offspring, three, two and one year old, and troutlets of last winter's hatching, all artificially bred. These gentlemen also exhibited in another case a considerable number of the different varieties of Bass, suited to cultivation in still water, taken from their ponds.

Dr. Garlick is entitled to great credit for the very perfect manner of arranging his cases for exhibiting this novelty to the gaze of an admiring multitude.

The grounds, buildings and the arrangements in general of the Ohio fair, afforded evidences of improvement in these matters, and the attention extended to strangers, delegates and editors from abroad, entitle the State Board to the thanks of many who were present.

#### NEW YORK STATE FAIR.

The exhibition of the New York State Agricultural Society was held at Watertown, Jefferson county, on the 30th of September, and continued four days. The two first days were of the most discouraging character, in consequence of a cold, chilling wind and incessant rain, which prevented the complete arrangement of the articles and deterred many persons from attending. The third and fourth days, however, proved more favorable, and the attendance was greater than could have been expected. Watertown is situated on the extreme northern verge of the State, where thousands of the inhabitants of the surrounding country had never before attended a

State Fair, and were determined to improve this opportunity and came, notwithstanding the floods of rain.

The general arrangement of the grounds and buildings was good, though the high wind during the first day prostrated the large tents under which were exhibited the fruits and flowers, and the garden, field and dairy products. These were finally raised, and the arrangement of the articles in part restored.

In the stock department there were 230 horses of the better class of serviceable animals, such as would do credit to any country. Many of the horses were of the Black Hawk stock, of which Vermont contributed some choice animals. The entries of cattle numbered about 270. There were some Short-horns, but these would not, however, compare favorably with our western Durhams. The Devons were fine; of these there were 86 head. There were also, some good representatives of the Hereford, Ayrshire, Alderney and Holderness breeds; also a good show of grade and native animals. The number of swine was small, and these mostly of the improved Suffolks. Sheep were largely represented, embracing all the choice varieties.

The show of fruit, garden and field products was very superior, indicating no signs of the extreme drouth which has shortened our crops so much in the west. Even in the most favored seasons the exhibition of grain and most other vegetables show most conclusively great improvements in cultivation. But it is of that class of mechanical inventions which promise to be of service to our readers, that we desire to speak more in detail; and prominent among these was a most simple steam engine, adapted to all kinds of farm work, but more particularly to sawing down the largest trees in the forest, and then sawing them into any desired length with an ease and facility that must be seen to be appreciated. Any one who has a general idea of an ordinary steam engine will readily understand the arrangement of this. A boiler with a chimney is mounted on a pair of stout wheels, and the whole occupies about as much room as an ordinary ox cart, and is arranged to be drawn with a yoke of oxen. The engine consists of a thin wrought iron cylinder, three inches in diameter and two feet long, a steam pipe the same length and one inch in diameter, and valve rod one-quarter of an inch thick and one inch wide, and twice as long as the cylinder. The whole is secured to a piece of scantling 4 by 6 inches square and 7 feet long, with a dog, like an ordinary cant-hook, to secure the whole to the log to be cut. This constitutes the entire engine,

except the pipes through which the steam is conveyed from the boiler to the engine, which is flexible, and made of Indiarubber, in the form of common hose; this is several rods in length, which will admit of cutting a large number of trees within a circle of its length around the boiler. The saw is secured directly to the end of the piston rod; the whole not weighing over 200 pounds, and was worked with great facility by a boy sixteen years old. We saw beech logs 18 inches in diameter, cut off in less than one minute, and the whole is moved, ready for another cut, in less than half a minute. The valves are not worked in the ordinary way by direct motion with a piston, but by a twist in the rod a cap is turned back and forth over the steam openings in the chamber. There were two engines of this kind to one boiler, in order to show at the same time, the various purposes for which they can be employed. One was running a large threshing machine, separator and cleaner; for this purpose a frame composed of two sills and two upright pieces, is necessary to support the band wheel where a rotary motion is required. For ordinary work, one engine will answer all the purposes, requiring but a few minutes to change it from a direct to a rotary motion.

These two machines are the first that have been made, and have been in use several months in cutting timber in the woods, and they now appear to be in as good condition as when new. It is the invention of Mr. Fairbanks, of the firm of Fairbanks, Wilmott & Co., 343, Broadway, New York.

In addition to this machine, there were twelve other portable steam engines on the ground, by different manufacturers. Seven of these were from the manufactory of Messrs. Hoard & Sons, of Watertown. Mr. Hoard, in company with Mr. Bradford, we believe were the first in the United States, to commence the manufacture of steam engines for farm work, and exhibited their first machine at the New York State Fair, about six years ago. They have since turned out between seven and eight hundred of them, which are employed, besides in farm work, for every other purpose requiring motive power, and have been sent to almost every State in the Union.

We also noticed a new Stump Extractor, which appeared susceptible of very easy management and powerful in its operation. Besides the operation of pulling stumps, with an addition of a baling box, the proprietors have made a hay press of it, by which they claim the application of great power; if this is sufficient, it will prove a most valuable machine for

the farmer and hay grower. It is Ruggles' patent, manufactured by G. D. Horris, of Fitchburg, Mass.

Among other novelties was Dr. Evans' patent Digger, designed to take the place of the spade and the plow. It is a formidable looking machine with its hundreds of long steel teeth, but of its performance we had no opportunity to judge—one thing is quite evident, the time is near at hand when the means of more thoroughly pulverizing the soil will be brought into general use. The late prevailing dry seasons demand this as an essential means of successful farming.

Each night during the fair, meetings were held by the fruit growers representing different sections, at which very interesting discussions were carried on upon the various branches of pomology. Meetings were also held by the farmers, at which the best method of feeding cattle and horses, butter making, &c., &c., furnished subjects for much interesting, useful conversation.

We like this method of spending the evenings at our State and County fairs, and hope the practice will be generally adopted.

#### THE GREAT NATIONAL AGRICULTURAL EXHIBITION.

The fourth exhibition of the United States Agricultural Society opened in Philadelphia on the 7th of October and continued to the end of the week—five days.

Taken together it was the most successful exhibition the society has held since its organization. The weather during the whole period was never more delightful, the temperature just such as to be most pleasant, and without a cloud to obscure the sun, even for one moment.

The gentlemen to whom had been entrusted the preparation of the grounds (which were situated at Pavilton, near the city water works) performed their part in the most satisfactory manner. Forty acres were enclosed and fitted with all the necessary stalls and buildings for a great National Agricultural festival.

#### THE INAUGURATION.

At 10 o'clock a grand cavalcade of all the horses on exhibition, was formed under the direction of the chief Marshall, in front of the judges' stand. The President, the Hon. Marshal P. Wilder, then in a short and appropriate address, declared the fourth annual exhibition of the U. S. Agricultural Society duly opened. The horses were displayed upon the track for about half an hour, and were then withdrawn. Then followed the examination of the different

classes of cattle and horses upon the track, and the trial of speed of horses at stated intervals, and which was continued during each day of the exhibition.

The track was about one-third of a mile in circumference, and was provided on one side with elevated seats sufficient to accommodate 8000 persons. These seats were constantly filled during the exhibitions, and particularly during the trial of speed of the horses in harness.

Besides the interest afforded by these various exercises, the numerous animals of all classes in the stalls, the poultry, and the great display of agricultural implements and machines upon other portions of the ground, attracted a vast concourse of people during the entire five days of the exhibition.

#### THE HORSES.

There were upwards of 350 horses on exhibition, and among them some of the finest animals in the country, but we hardly considered the show in this department equal to that at Boston last year.

#### THE CATTLE.

The whole number of cattle in the pens we did not learn, but it was quite large, embracing all the breeds reared in this country. The Durhams, for an Eastern exhibition, were good, some of the bulls weighing from 2,150 to 2,550 pounds, but they seemed to lack the sleek skins and rounded forms imparted to them on the rich blue grass pastures of the more genial West.

The Devons were in considerable numbers, and are evidently better adapted to a cold climate than the Durhams. There is a great uniformity in form and color of this noble breed of cattle. For the yoke they are not equalled by any other. They are strong, travel fast, and readily learn to obey the driver.

Besides these, there were a goodly number of the Alderney, Ayrshire and Hereford breeds.—The Alderneys or Jerseys, when compared with the Durhams, present a most striking contrast, and a stranger would be ready to class them among Pharaoh's lean kind. They are exclusively a milking breed, and their secretions are so far exhausted in this channel that they always look thin in flesh.

#### SHEEP.

This part of the exhibition was good, and we believe all the kinds reared in the United States were there. Among them there was a dozen of the Tartar or Tunis breed, with broad, heavy tails, celebrated for their rich mutton. There were from Vermont, some fine French Merinos, and from the Rocky Mountains a breed with horns with an extraordinary twist around their ears, which attracted great attention.

Col. R. Peters was present from Atlanta, Ga., with a number of Cashmere goats, both pure and a cross upon the common goat of the country. The second cross produce a good fleece. The fine, silky covering of these beautiful animals attracted great attention. Col. P. it is said, is very successful in rearing these animals.—The fleeces readily sell for \$10 or \$12 a pound.

#### SWINE.

We were well pleased with the number and quality of the hogs on the ground. Besides some excellent animals of the Berkshire, Essex, and particularly of the Suffolk breeds, there were a large number of the celebrated *Chester County*, (Pa.) hogs. This is a large, well formed, thrifty breed of swine, extensively raised in this and other States,—a breed that retains its uniform character to a degree that renders them well established and truly valuable.

#### POULTRY.

We have seldom witnessed a better show of poultry than was found here. Besides the contributions from the farmers generally, the "Pennsylvania State Poultry Society" made a grand display of all the numerous kinds known in our country, and some that we had not before met with, particularly the white Polanders, a most beautiful crested breed, purely white; also a breed labelled "Silk Fowls of Japan," these were also pure white, without feathers, but covered with a thick, fine down, and what rendered them more remarkable, their feet, bill, comb and gills were of a deep blue color.

#### FRUIT AND VEGETABLES.

An account of these, and of some of the awards of premiums will be found in our Horticultural Department.

#### AGRICULTURAL IMPLEMENTS AND MACHINES.

This department has never before formed a part in the great national fairs of this society. Philadelphia has recently become noted for the number and extent of her manufacturers in this line, and prominent among whom are Messrs. D. Landreth & Sons, Messrs. Paschall, Morris & Co., Messrs. Rogers & Boyer, and Mr. Chas. Bradfield. Each of these establishments furnish a large collection of the different specimens of their manufacture and of other articles in their trade; besides these, there is a very extensive collection of different implements and machines from almost all parts of the Union, even North Carolina, not particularly celebrated for her manufacturing industry, was there with her patent plows, clod cutters, &c. From Boston, Messrs. Nourse, Mason & Co., exhibited 70 plows no two of which were of the same size and pattern, besides an immense collection of other

farm and garden tools. Taking the whole of this department together, it forms the most extensive and complete exhibition in this line that has ever been held in this country.

As is usually the case, there is among these many new patented articles which will not bear the test of practical application, and after they have served the purpose of their sanguine inventors to *humbug* those who are green enough to purchase town or county rights, will finally be forgotten. But while this is the case, we noticed many new inventions of very useful machines that are worthy special attention. In the collection of D. Landreth & Sons, is a new Clover Seed Gatherer, worth \$35, which from its simplicity cannot but be efficient and highly valuable for that important use. Next to this is a Clover Seed Huller and Separator, which comes at the same price and is equally valuable, and particularly important to our Kentucky and Missouri farmers. In this collection is also found Delano's Independent-tooth Horse Hay and Grain Rake. This implement is not new, but this and similar rakes constitute the only style here used, and which seems in this section to have entirely superseded the revolving horse rake. In another collection is Randall Pratt's patent Independent steel spring tooth Grass and Grain Rake, a new and very valuable implement. Combined with the rake is a Seed Drill, which sows any desired quantity of clover, timothy or other grass seed per acre with the greatest perfection and accuracy. Price \$35, made at Newton Square, Delaware Co., Pa. We also noticed a new and improved Wheat Fan, Robert's patent; it being more simple and at the same time more perfect in its operation than any of the old fans, and works without jar or noise.

In the collection of Nourse, Mason & Co., of Boston, we saw a new patent Gang Cultivator, which is less expensive and more simple than any now in use in the East. It is useful for pulverizing the soil more perfectly than the harrow will do it, and is still more valuable in seeding grain, which covers the seed next in perfection to the seed drill. In this collection is another implement, and for the benefit of our western readers is worthy of special notice. It is a steel double-mouldboard plow, with high, broad wings, for ridging up cotton lands, but is equally valuable for forming the ridges for sweet potatoes, leaving no work to be done with the hand hoe.

Another valuable implement is a patent field roller and clod cutter combined. Besides the roller, which is armed with teeth or knives for cutting and pulverizing the clods, it is hung in



a frame similar to a harrow frame, which is also filled with cutters or teeth. The secret of good crops depends much upon the thorough preparation of the land, and when we notice any new implement calculated to secure this end, we take pleasure in calling attention to it.

Among the novel inventions was a Weighing Cart, provided with a beam or scales, equal to *Fairbanks' best*, by which the load is weighed as it is put in. But connected with the cart it must be liable to injury and derangement, and can hardly come into general use.

Another labor saving machine is a Self-loading Cart, which fills the earth from the excavation by the draft of the horse, and as readily drops it when drawn to the desired spot. It is patented by Z. Butts, and manufactured in Philadelphia. He claims for it a great saving of labor on railroads, canals, &c., and says it is now in use on the public works in Pennsylvania. Machines for spreading lime, guano and other concentrated manures, were exhibited by most of the Philadelphia manufacturers of farm implements. They perform the work with ease and uniformity. Grain Drills also constituted a prominent article, showing the growing demand and the importance of their use. Horse powers were mostly, or all, with one exception, of the endless chain or railroad pattern. The iron cog geared machines, so common in Kentucky and other portions of the West, do not seem to be countenanced among the intelligent farmers and manufacturers where economy in power and labor is a desideratum. Mowing and Reaping machines still continue to occupy a large share of the inventive powers of American genius. Of these machines, there were on exhibition a very large number of almost all the kinds that are made, and many that we have never before seen, some of which seemed to possess valuable improvements, among these is one patented by S. Phillips, of Harrisburg, Pa., and Wagner's, of Philadelphia. The former is improved in the arrangement of the platform and the raker's stand, and also has an important improvement in the connection of the knife with the running gear, as well as in the knife itself. The other is an exceedingly simple machine, weighing but 675 pounds. S. S. Allen, of Bristol, Pa., also exhibited a Mower and Reaper with improvements.

#### THE BANQUET.

On Friday at 1 o'clock was the time fixed for the great banquet, but through some unavoidable delay, the procession was not formed for the occasion until half past 2 o'clock. There were about 2,200 ladies and gentlemen who sat

down to the tables on this occasion, under an immense tent. After doing ample justice to the good things provided, Col. Wilder, the President, addressed the Society and persons present, extending a cordial welcome to all, and made a most happy allusion to our fathers who eighty-one years ago planted in the city of "Brotherly Love" the tree of Liberty, beneath whose genial shade we reposed, and of whose fruits we then partook. At the conclusion the President offered a sentiment which was responded to by the Governor of Pennsylvania. After this the Governor of New Jersey was called upon, who also in turn made a handsome speech. The President then introduced to the assembly the last family representative of the immortal Washington, the Hon. George Washington Park Custis. The venerable farmer of Alington then arose and addressed the audience for half an hour in a strain that called forth frequent bursts of applause. We wish that space would admit of our giving some extracts from his speech. In appropriate sentiments the President called out several other distinguished speakers, among whom were Wm. M. Meredith, Esq., the Hon. Josiah Quincy, of Mass., and others.

The evening being far advanced, the President then proceeded to announce the premiums awarded which were from \$250 down, in the aggregate amounting to \$14,000.

Saturday was the closing day of the fair, and the exercises of the day were concluded by a large sale of stock.

The weather throughout was never more delightful. The President estimated the number of persons who entered the grounds during the fair, at 200,000, and the entire receipts at over \$60,000, taken at the gates and for seats upon the stand.

So far as we could learn the utmost order prevailed—no drunkenness, or impropriety, or accident occurred to mar the pleasures of the occasion.

The principle premiums awarded on cattle, &c., were as follows:

Best herd of Cattle, a sweepstakes premium of \$250 to Samuel Thorn, of Dutchess Co., N. Y.

The best Durham Bull and four Cows, \$100, to Samuel Thorn, Dutchess Co., N. Y.

The best Devon Bull and four Cows, \$100, to William B. Dobbins of Maryland.

The best Hereford Bull and four Cows, \$100, to William H. Sotham, New York.

Mr. Samuel Thorn, of New York, also took several premiums for Durham Bulls and Cows.

Mr. Wm. H. Sotham, of New York, won three of the premiums for Hereford Cows and Heifers.

For the best Stallion, four years old and upward, the first premium, of \$200, was awarded to John D. Grovers.

**POTATOES--FALL PLANTING.**

The dry weather of the present season as well as that of 1854, has proved particularly disastrous to the potato crop. Our seasons at best are not altogether adapted to this root. It requires a climate more moist and of a lower temperature, like that of Great Britain or the northern portions of the United States, to grow the potato in perfection.

The demand for potatoes in the southern markets communicating with the Ohio and Mississippi rivers, notwithstanding the disadvantages of climate, renders the crop an important one to many of the farmers residing near these rivers. To produce a good crop the planting should be done early in the spring, followed with seasonable rains until the middle or last of June, so as to insure maturity at the earliest possible period, before the heat of summer becomes extreme, which is prejudicial to the development of all root crops.

To guard against the effects of the drouth, and to insure a good crop of potatoes in seasons like the present, every large planter and gardener would do well to plant a few acres in the fall and cover the ground with straw, in situations where this material is convenient. It will require some labor to coat half a dozen acres in this way, but no more profitable disposition can be made of the straw; and every farmer should return to the land in some manner, all that is made upon the farm. The straw will assist in protecting the seed from the effects of frost in winter, and will insure the young plants from injury by frost in spring; and during the growth of the crop will keep the ground moist and cool, which are the essential elements of the perfect development of the root.

The planting should be deferred till as late a period in the fall as it can be with safety, and do the work while the soil is in a suitable condition to plow. The drills should be laid off not to exceed *two inches* deep, and the seed covered with the plow, throwing a light furrow from each side, so as to form a narrow ridge over them; this will protect the seed from the water, which will find lodgement in the furrows on each side. After the planting is completed, cover the whole surface three or four inches deep with straw.

In a season like the present, a few acres planted in this way, would yield a crop that would prove highly remunerative, as the potatoes would be brought to full and perfect maturity in the early part of the season, which at the present prices would yield a large return to the acre.

**CHINESE HEMP.**

In making an agricultural tour through several counties in Kentucky, during the month of September we passed through Woodford county, where a considerable quantity of this hemp had been sown. We were the more anxious to examine the crop grown in one of the dryest seasons the country has ever known, and compare the growth with the common variety.

From our own observations, and from what we learned from others, the hemp crop throughout the State will hardly yield one-third of an average crop. We saw whole fields of the common hemp in several counties that will not be cut at all, and other fields where considerable portions are left not worth cutting.

The Chinese hemp requires to be sown about one month earlier than the ordinary kind, and it will not mature until about one month after the latter is cut. This, in a dry season, proves a matter of no small importance with the Chinese variety, as it acquires a considerable start before the other is sown, and it is still growing vigorously.

We visited the farms of Messrs. M. B. and H. C. Gratz, and Mr. Wm. L. Vance and others, who, together, have several hundred acres now growing. Mr. Vance has over 100 acres. On the poorest and most worn field on his farm, the average height is 7 1-2 feet. In a low, moist field, we measured some that would average over ten feet high, and is estimated to yield 1,700 pounds of lint per acre. We have the promise of some further facts touching this new hemp when the crop is dressed, which we shall lay before our readers.

We will not omit to acknowledge our obligations to Messrs. Gratz, Vance, Col. McKee, and Mr. Alexander, for their attentions in extending to us every facility in making our agricultural observations in Woodford county.

**How Much Shall We Cultivate?**

One paper of New York says "plant one acre more;" another paper replies, "plant one acre less." The object of each is to increase the amount of produce. The first seeks to do it by cultivating more in the present manner of cultivating; the latter by cultivating less and doing it better. Now, whether we cultivate more or less, we are in favor of cultivating better. Improve the manner of cultivating and we not only increase the quantity, but improve the quality also. We are decidedly of the opinion that many farmers cultivate too much and do not do it well enough. No farmer should be satisfied with fifty or sixty bushels of corn to the acre.

He may just as well have a hundred. Nor should he be satisfied with one ton of hay to the acre. Two or three would pay him much better. So with other things. The best qualities and kinds should be raised, under the best style of cultivation. This is the best way to increase the quantity of produce and ensure the prosperity of the farmer. We know a farmer in an adjoining county who has given much attention to the culture of wheat. His usual crop is from 2000 to 2500 bushels per year, and he generally gets five cents per bushel above the market price for his wheat. The doctrine that the best culture is the most profitable, is beyond all question, true. Besides all the pecuniary benefits, the best culture reflects back upon the farmer and actually cultivates him—makes him a larger and nobler man. \*

### FARMING BY RULE.

If farming is a science and a trade as we believe, then it ought to be done by rule. It has a system in principle and it ought to have in practice. There is a time, a place and a way for everything connected with the business. And the best success is to be found in practicing the best system. Farming is like housekeeping or school-teaching, or manufacturing, in this respect, if it is not done systematically, it is done to a great disadvantage. There is a waste and loss at all ends and all corners. The waste in time is very great. The waste in material is much. The waste in produce is not a little.

How many farmers there are who do everything by guess or at random. They plow all soils alike for all crops. They sow when they happen to get ready, whether the season, the soil, or the weather is right. They have no idea of the size of their fields nor the quantity of seed they put on to the acre. They guess it is about right. They have no system of rotation of crops; no plan for saving manures or fertilizing their soil; no way of draining; or of feeding to do their stock the most good with the least feed. The road is their cow yard and pasture. The door yard is their hog pen. A rail fence is their only gate. Their fowls are everywhere where they ought not to be, destroying and wasting. Their tools, carriages and harness are always out of order, and generally exposed to the sun and rain. Their stock is wandering they know not where. Their fences are fast going down or fast going to ruin. Unruly horses, hogs and cattle are often breaking in where they ought not to be. Fence corners and headlands are growing up with briars

and brush. Orchards are untrimmed; gardens are neglected. Weeds grow; crops fail; stock die; tools break; family gets sick; expenses multiply; profits diminish; spirits flag; home becomes unhappy; who can tell what does not follow that is miserable? All this may be avoided by systematic farming. Every merchant knows that if his business is not done in order and in time, he is the loser. The mechanic knows the same thing. The farmer ought to know it. In no business is system more requisite than in farming. The farmer has to do with fixed laws. They must be obeyed or he or his crops suffer. Order is heaven's first law; so it should be the farmers. \*

### A PIECE OF LEGAL ADVICE.

SOME of our worthy cotemporaries are publishing "Farmers' Law." For some time we have had the same plan in contemplation for the benefit of our readers. It matters not how much a farmer knows of the laws of the land under which he lives, or of the laws of nature more intimately connected with his calling and his prosperity, but the less he has to do with law, the better it is for him. In looking over an old newspaper we met with the following piece of *Legal Advice*, which our readers shall have for less than three pence, which will be found always useful and always profitable. Read it.

The ancient town of Rennes, in France, is a place famous for law. To visit Rennes without getting advice of some sort seems absurd to the country people round about. It happened one day that a farmer named Bernard, having come to town on business, bethought himself that as he had a few hours to spare, it would be well to get the advice of a good lawyer. He had often heard of a lawyer named Foy, who was in such high repute that people believed a lawsuit gained when he undertook their cause. The countryman went to his office, and after waiting some time, was admitted to an interview. He told the lawyer that having heard so much about him, and happening to be in town, he thought he would call and consult him.

"You wish to bring an action, perhaps," replied the lawyer.

"O, no," replied the farmer, "I am at peace with all the world."

"Then it is a settlement of property that you want, is it?"

"Excuse me, Mr. lawyer, my family and I have never made a division, seeing that we draw from the same well, as the saying is."

"It is, then, to get me to negotiate a purchase or a sale, that you have come?"

"O, no; I am neither rich enough to purchase nor poor enough to sell."

"Will you tell me, then, what you do want of me?" said the lawyer in surprise.

"Why, I have already told you, Mr. Lawyer,"

replied Bernard, "I want advice; I mean to pay for it, of course."

The lawyer smiled, and taking pen and paper, asked the countryman his name.

"Peter Bernard," replied the countryman, quite happy that the lawyer at length understood what he wanted.

"Your age?"

"Thirty years, or very near it."

"Your vocation?"

"What's that?"

"What do you do for a living?"

"Oh! that's what it means, is it? Why I am a farmer."

The lawyer wrote two lines folded the paper, and handed it to his client.

"Is it finished already?" said the farmer.—

"Well and good. What is to be the price of that advice, Mr. Lawyer?"

"Three francs."

Bernard paid the money and took his leave, delighted that he had made use of this opportunity to get a piece of advice from the great lawyer. When the farmer reached home it was four o'clock; the journey had fatigued him, and he determined to rest the remainder of the day. Meanwhile the hay had been cut two days, and was completely made. One of his men came and asked if they should draw in.

"What, this evening?" exclaimed the farmer's wife, who had come to meet her husband. "It would be a pity to begin the work so late, since it can be done as well to-morrow."

Bernard was uncertain which way to deceiver. Suddenly he recollected he had the lawyer's advice in his pocket.

"Wait a minute," he exclaimed, "I have an advice, and a famous one too, that I paid three francs for; it ought to tell us what to do. Here, wife, see what it says, you can read written hand better than I."

The woman took the paper and read this line:

"Never put off until to-morrow what you can do to-day."

"That is it!" said Bernard, as if a ray of light had cleared up all his doubts. "Come, be quick! get the carts and away. Come boys, come girls; all to the hay field! It shall not be said that I bought a three-franc opinion and made no use of it. I will follow the lawyer's advice."

Bernard himself set the example by leading the way in the work, and not returning till the hay was brought in. The event seemed to prove the wisdom of his conduct, and the foresight of the lawyer. The weather changed during the night—an unexpected storm burst over the valley. The next morning it was found that the river had overflowed and carried away all the hay that had been left in the fields. The crops of his neighboring farmers were completely destroyed—Bernard alone had not suffered. The success of his first experiment gave him such faith in the advice of the lawyer, that from that time forth he adopted it as his rule of conduct, and consequently became one of the most prosperous farmers in the country. I hope that you, my readers will take a hint from his success, and "never put off till to-morrow what you can do to-day."

[Written for the Valley Farmer.]

### PORTABLE FENCES.

MESSRS. EDITORS:—My attention has been called to an advertisement in your Sept. No., of S. G. Tuft's Portable Self-supporting Fence.

In the summer of 1855 I put up a fence on the same general principle as that of Mr. Tuft's, except that mine is more simple in construction than his, requiring no tools except a saw and hatchet. Mine like his (see advertisement), 1st, can be made without posts, (but 2 or 3 inch stuff for the vertical pieces makes a better fence than one inch stuff.) 2d. Each pannel is made separate, &c. 3d. Mine can be made with 20 or even 25 feet less lumber to the rod than a common board fence. 4th. It can be made by the farmer in his shed or shop, &c. 5th. The only tools required are a saw and hatchet. 6th. It can all be connected together, but that will not prevent its being blown over, (of this more hereafter.) 7th. It can be made of boards of any length or width, &c. 8th. Any pannel can be taken out and replaced *much more quickly* than bars can be taken down and put up; in fact, nearly as quickly as you can open and shut a gate. So I think my fence has the advantage over Mr. Tuft's in two or three particulars.

In paragraph 6th, above, I stated that the pannels being connected together would not prevent the fence from being blown over. Mine was put up in June or July 1855. The transverse pieces were some of them three and some five feet long. It stood very well until the high winds occurred, which we nearly always experience about the autumn and vernal equinoxes, when every pannel was prostrated. It was, however, not injured at all, and was set up again in a few moments. It stood very well during some pretty hard blows through the winter, but went over again during the spring winds. I then altered my plan and gave my fence a five feet worm, (the pannels are 14 feet long), and I am happy to state that it now has withstood some of the hardest winds I have ever felt, and that it can be relied on as a fence that will answer every purpose and in any situation. As I have taken out no patent for my fence, I will give any one who desires it more particular information in regard to its construction.

I would further state that I have another fence, of palings or pickets, which is superior to the above or any fence I have ever seen, requiring less lumber, fewer nails and can be made to turn anything from a horse or an ox to a rabbit or a young chicken, and can be opened or closed at any pannel, as readily as you would open or close a gate.



While on the subject of fences, allow me to suggest that we have two or three shrubs growing in abundance in this part of Missouri that I am satisfied are better suited for hedging, in this latitude at least, than the Osage Orange, or more properly, I believe, Bois d' Arc.

1st. Being shrubs, there is no liability to "thin out."

2d. Being natives, there is no doubt of their standing our seasons, and can be procured without cost.

3d. One, if not more of them has been used for several generations, consequently it is no experiment. More hereafter, perhaps on this subject.

Yours truly,

F. B. SCHUTZ.

Hazleside, Marion Co., Mo.

[Written for the Valley Farmer.]

### HEDGE FENCES.

MESSRS. EDITORS:—To pursue this theme with all good fidelity may not be so pleasant in some departments as others. Facts and faithfulness may call for passages which shall contribute more to the benefit of the public than to that of the writer.

The first era of Hedge Fences in this country, is the same with that in which Barnum plowed with the Elephant, and contributed so generally to make humbuggery a business. Whether fortunately or unfortunately, for our cause, opinions may vary, but of the fact, I am constantly reminded at every turn.

To show how the public mind has been misled in regard to the care and whole cost of hedge fences, is only to mark the common difference between sober truth and poetical fancy. It cannot escape the sober senses of close observers of things in general, that there prevails at this time a kind of *Hedge Fence mania*, which must work much mischief before it can be arrested. Circulars containing most extravagant statements and propositions intoxicating to the unguarded, have been scattered abroad abundantly, for two or three years past.

Whoever will take the trouble to look into the *Valley Farmer* of July 1854, will see in a communication, offers made in the most public manner, to grow hedge fences complete by the hundred miles for 55 cents per rod. But these parties are now known as having abandoned the business altogether, because unprofitable! And why should they suffer their silence to still mislead, or let it devolve upon any other to disabuse the public mind?

As a later sample of professional exaggeration and *dashing off* of statements in a popular "taking" style—allow me to quote from page 30 of a large pamphlet entitled "Information for Kansas Emigrants," prepared by Dr. Thos. H. Webb, Secretary of the New England Emigrant Aid Company, published the early part of the present year.

"FENCING, &c.—To fence with rails will cost about sixty cents per rod; stone walls can be built for about one dollar per rod; and what is known in the Territory as Picket Fence, for forty cents per rod."

(Messrs. Editors, see how this contrasts with your report of the cost of stone fences in the Shaker settlement of Mercer county, Ky. They say their stone fences cost them more than \$3 per rod,—a people as proverbial for truth as they are for economy).

And notwithstanding this very definite statement, and encouragement to fence making of most astonishing cheapness, in another place the emigrant is told that the Osage Orange will grow luxuriantly—will serve the best purpose for fencing and cost the least of all!

The Ill. Central R. R. Company's, pamphlets which have been scattered like the leaves of the forest, contain a paragraph about hedge fencing, on page 17, as follows:

"The Osage Orange plant has been extensively introduced, and is rapidly supplanting all other kinds of fencing. Being at the same time, more permanent and secure than any other, and highly ornamental, it must soon be universally employed. It can be raised by contract at 75 cents per rod; parties making a business of preparing the ground, setting out the plants, and cultivating and trimming them until a perfect hedge is produced for the settler. For this, one-third of the contract money is paid upon the setting out of the plants, and the balance when the fence is completed, without interest."

I am very willing to admit that this is without exaggeration, strictly within the bounds of historic truth. Hedges are contracted for in Illinois, extensively, but how are the contracts being fulfilled! After two and three years operation upon a grand scale, how do their works appear? Ah! "thereby hangs a tale."

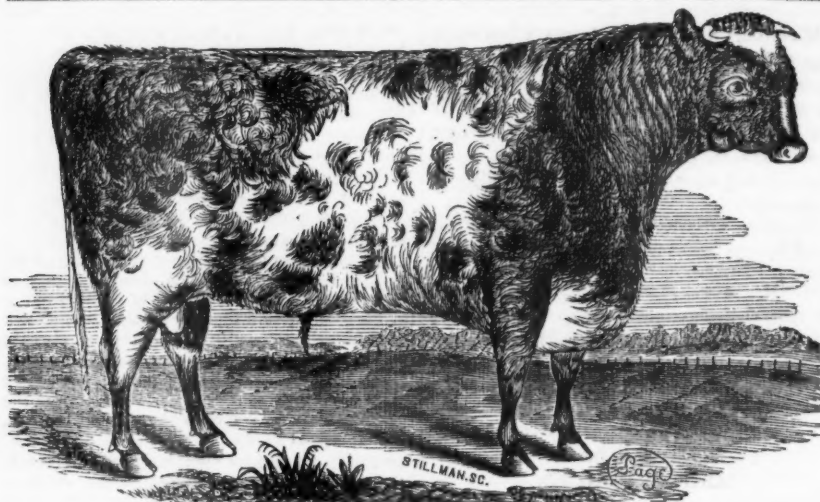
When we shall hear of hundreds of miles of hedge fences being *actually grown and completed* by faithful and efficient companies, and shall have true statements of the *time and cost*, then we shall be able to discern more exactly the difference between romance and reality, and all will then see that the presuming hint with which the Central R. R. Co., close their paragraph, is in the scale of practical valuation—is worth the most of all:—

"Farmers preferring to raise plants from the seed, or procure them from nurseries, tending the hedge themselves, can probably procure their fence more economically than by contracting."

There are "fast" men engaged and engaging in contracting to grow hedge fences by large quantities in Illinois. The unfaithfulness of some, making of the business a kind of itinerant traffic in tricky impositions upon farmers is just being detected. Indignation found very decisive expression at a Hedge Grower's meeting which I attended in the evening of the third day of the late Fair at Alton, and I am glad to know that an abler pen than mine will soon be employed to expose and forewarn against the miserable botch-work of *pretenders* in the business.

More anon. LOGAN SLEEPER.

Bridgeton, Mo.



SIR ARTHUR. ●

The property of R. W. Musgrave, Esq., (one of the members of the "Ohio Farming and Stock Breeding Company," of Butler county, Iowa,) of Sulphur Springs, Crawford county, Ohio.

Roan, calved September 7th, 1854, sired in England by Gilliver (11,529, English H. B.) dam Dahlia, (imported by the Clark county, Ohio, importing company, in 1854,) by Upstart, (7960) gr. dam, Daisy, by Sweet William, (8646) 3d dam, Daffodil, by Harrold, (8131) 4th dam, Lucy Dennison, by Cedrick, (3,311) 5th dam, by Fisher's son of Favorite, (1028) 6th dam by Corlebs, (897) 7th dam, by Rose Bud, (3,009,) 8th dam, by Fishers Bull, (3,797.)

PEDIGREE OF GILLIVER, SIRE OF "SIR ARTHUR."—Calved Sept. 8th, 1851, bred by and the property of Mr. Jonnley, Jonaley Park, Burnley, got by Lord George, (10,439,) 1st dam, Blanche 5th, by Duke of Northumberland, (1940,) 2nd dam, Blanche 2nd, by Norfolk, (2377,) 3d dam, Blanche, by Belvedere, (1706,) 4th dam, Lupin, by Belvedere, (1706,) 5th dam, Julep, by Lancaster, (360,) 6th dam, Ruby, by Petrarch, (488,) 7th dam, by Major, (397,) 8th dam, Stranger, by Chapman's son of Punch, (122,) 9th dam, Old Roany, by Dickson's gr. son of Punch, (213,) 10th dam, Roaned Heifer, by Checks, (132,) 11th dam, Red Sall, by R. Grinstone's Bull, (282,) 12th dam, Lockburn Sall, by J Coat's Bull, (148.)

(The crop of calves for 1857, from the cows owned by the "Ohio Farming and Breeding Company," will be from "Sir Arthur.")

## Stock Raising Department.

[Written for the Valley Farmer.]

### SHEEP RAISING.

As the raising of sheep and especially the long wool breeds, has become an important item in the industrial pursuits of the United States, and particularly Kentucky, it may be of advantage to those who may wish to engage in the raising of this kind of stock, for such individuals as may have had experience in the raising of the same, to give through the Valley Farmer, (it being widely circulated through Missouri as well as Kentucky,) a description of the different varieties as they now present themselves, together with an abridged history of their origin, as far as known. Entertaining this opinion, and having been engaged for some time past, in the raising of sheep, I have concluded to submit to

your readers such observations as my experience has enabled me to make.

The Cotswold seems at present to be more particularly attracting the attention of the public mind, and hence, seems naturally to stand first in order. This species has a large, broad head, without horns, the head and face is well covered with wool, the carcass is long, bulky and heavy, there is great depth and width of chest, the bones are large, neck short, back slightly arched and droops from the coupling to the tail, over which is formed in an aged or fat animal what is called the butchers pone, the general appearance is dull and sluggish; wool of fine length, varying from ten to fourteen inches, with a natural wave commencing with the body and extending to the end of the fibre, and those waves are more strongly developed around the neck and shoulders; the fibres are of a rich lustre, soft, elastic and free from hair on the neck, belly and hips.

The second we shall notice is the Bakewell. The head of this species is large, but not so broad in front as the Cotswold, their faces are white and they are without horns, they are long bodied, especially between the shoulders, which are broad; they are light in the brisket compared with the Cotswold, and tuck up behind the fore leg; ribs short, not sufficiently long to give weight to the body; bones small; back straight, but broad in the hind quarters for the proportions in front; thighs full; the ears are set back, and there being a considerable prominence on the pole of the head, the ears have given to them a drooping or lopped carriage. The head and parts of the neck, belly and legs are clear of wool, which upon the body is of moderate length, but thin; the fibres of wool are straight, but contain more or less hair in it, particularly in that found upon the belly and hip locks.—This class seems to be rapidly going out of repute.

The Leicester breed has been so well described by a writer in the *Western Farmer and Gardener* in an essay upon the subject we have under consideration, which made its appearance in the July number of that work for 1841, and the description there given so nearly corresponds with our observations that we are willing to adopt that description.

"The head should be hornless, long, small, tapering towards the muzzle, and projecting horizontally forward; the eye prominent, but with a quiet expression; the ears rather thin, long and directed backwards; the neck full and broad at its base, or where it proceeds from the chest, but gradually tapering towards the head and is particularly fine at the junction of the head and neck, the neck seeming to project straight from the chest, so that there is, with the slightest possible deviation one continual horizontal line from the rump to the poll; the breast broad and full; the shoulders also broad and round and no uneven or angular formation where the shoulders join the neck or back, particularly no rising of the withers or hollow behind the situation of these bones, the arm fleshy through its whole extent and even down to the knee, the bones of the legs small, standing wide apart, no looseness of skin about them and comparatively bare of wool, the chest and barrel at once deep and round, the ribs forming a considerable arch from the spine, so as in some cases, and especially when the animal is in good condition, to make the apparent width of the chest even greater than the depth; the barrel well ribbed down; no irregularity of line on the back or belly, but on the sides the carcass very gradu-

ally diminishes in width towards the rump; the quarters long and full, and as with the fore leg, the muscles tending down to the hock; the thighs also wide and full; the legs of moderate length; the pelt also moderately thin, but soft and elastic, covered with a good quantity of white wool, not so long as in some breeds, but considerably finer." The writer very justly remarks that they are not without their faults; that they are not prolific breeders. Their fleece contains much hair, but in this respect they are superior to the Bakewell.

The description that has already been given of the Leicester sheep will in most respects answer the description of the New Oxfordshire. The principal difference is that the latter have much greater length, more height and larger bones, with the exception of the bone just below the knee, which is very small for the proportion elsewhere; the ears being erect, long and thin, these as well as the face are of rather a purple hue. In the following particulars they exhibit much of the peculiar formation of the former: Head and face clean of wool; legs and belly with more or less rough wool on them; the fleece irregular, sometimes of remarkable length and of good quality, but thin, again it is found thick and very harsh. The fleece of this class, sometimes presents an irregular and rough surface of hairy-like wool; this is found more particularly among the larger size of sheep; the small class, especially the females, have generally smooth, regular fleeces, frequently slightly waved, and of a rich lustre.

In reference to the origin of the different varieties, it seems that the earliest historical account of a difference in this respect, upon which we can rely, was in the year 1437, at which time Don Duarte, king of Portugal, made application to Henry IV. king of England, for liberty to export therefrom, sixty sacks of the fleece of the Cotswold species, stating that he designed transporting the same to Florence, to be manufactured into a certain kind of cloth, interwoven with a filament of gold, for his own use.

Stow says, in his chronicle, "that in the year 1467, Edward the IV gave license to pass over into Spain, certain Cotswold sheep;" &c. Now these quotations evidently go to prove that for several centuries past, there has existed marked and striking peculiarities in this genus, and that some species have been held in higher repute than others.

The correspondent of the "*Farmer and Gardener*," in the essay before alluded to, says that "the Cotswold breed takes its name from a range of hills in Gloucestershire, on which they

are raised, known as the Cotswold hills." Camden says, "they derive it from the cots or sheds, in which they were housed for the night, or permanently for the winter, and the wolds or open hills upon which they were pastured in the summer." We would, however, be satisfied with either, and viewing this as a matter of minor importance, we pass to notice their first introduction into our State. This was done by Messrs. Bagg & Wait, then residents of the State of New York. In the years 1839 and 1841, they made two successive importations, from which time they have come into considerable repute, and have gained their full share of prizes.

It seems that the Bakewell sheep, from all we can gather, have no very great claims to antiquity, as they derived their origin as well as name from Mr. Bakewell, who lived at Dishly, in Leicestershire, England, about the middle of the last century. This gentleman, from a laudable desire to improve this kind of stock, made several attempts to accomplish it, and with some degree of success; hence the name Bakewell. The first importation of this species to this State, was made in the year 1835, by Gen. Garrad, and Capt. John Hutchcroft, of Bourbon county. This importation was succeeded by others of different varieties, and these again, by another of Bakewell, which at this time seemed to stand unrivaled.

The Leicester sheep, although imported into Kentucky shortly after the Bakewell, have never been raised extensively, owing, I suppose, to the smallness of their carcass and the lightness of their fleece, compared with other long wool breeds. We are led to believe that from this variety Mr. Bakewell made his improvement, and scanning both their excellencies and imperfections, we are bound to acknowledge that they are by no means the worst.

The New Oxfordshire breed was introduced into this State in the year 1848, by an importing company composed of several gentlemen from Bourbon county, viz: Rice, Hedges, Hutchcroft and Hume. These gentlemen made their importation from the flock of a Mr. Wm. Raybald, in the State of Delaware. This purchase was soon followed by others made by individuals from the same flock.

The gentleman who acted as agent for the above named company, was informed by Mr. Raybald, that his flock of Oxfordshire sheep was a cross of the Cotswold and Leicester varieties, his original flock being an importation from England of this cross. This statement is sustained by a letter written by Mr. Charles Garrad, of Bourbon county, one of the agents of

the Northern Importing Company, of 1853.—This gentleman, while in England, wrote a letter home, in which he stated that the opinion in England was, that the New Oxfordshire sheep were a cross of the Cotswold and Leicester; that they had been reared at one time by a Mr. Chas. Large, an extensive breeder, but failing to compete successfully with the Cotswold, he had sold out. This opinion is further sustained by James Bagg, an Englishman by birth and education, and one of the firm which first imported the Cotswold sheep into Kentucky. This gentleman was afterwards one of the agents of two importing companies for 1853 and '54.

The striking peculiarities, or distinguishing characteristics are at present so plainly marked, so strongly developed by the long wool varieties of sheep in Kentucky, that there can be no doubt left upon the minds of experienced breeders as to what class they belong; and even allowing that the three varieties between which we have as yet been unable to trace any direct connection, were all of the same origin, every one must acknowledge that their culture has been such as to present varieties that differ as widely in Kentucky as can be marked in almost any other class of animals. Hence the appropriateness of the term, to this as to other classes of animals, "thorough-bred." Although it is a common practice to call the cross of the different varieties of long wool sheep, thorough-bred, we are disposed to think that the appellation would be more justly applied, if (as in the case of the Oxfordshire sheep) a greater length of time were allowed to elapse in which they might mark out more of the peculiarities of a distinctive breed. In this opinion we find that we are not alone. Col. Josiah W. Ware, of Virginia, one among the most extensive importers and breeders of long wool sheep in the United States, has expressed himself upon this subject with great plainness, viz: "but as well call the product of a thorough-bred jack and thorough-bred mare, thorough-bred.—[Circular for 1855]

The Oxfordshire sheep are very handsome, not so large as the Cotswold, but possessing great beauty and symmetry. The Cotswold, in several respects, seems to show a disproportion when compared with other sheep, on account of their great width and depth of chest and corresponding size of bone; but this has doubtless been the cause of their becoming favorites in England. Another peculiarity is the accumulation of the bone over the root of the tail, which to the eye of some, might give the thigh an appearance of deformity; but upon examination, we find that the deposition of flesh is up-



on that part where such steaks are cut as delight the epicure. This species secures to the breeder not only a healthy animal, but one of good fattening qualities, and a bone of sufficient strength to sustain the animal under very heavy weight; and it has been found that transportation does not lessen their hardness or prolific breeding. There are ewes in my neighborhood that were bred by me in 1841, making them fifteen years old this spring, that have been regular breeders since they were one year old.

It is strange that notwithstanding such an effort is being made to improve this kind of stock, many of our farmers are so slow to exchange the small and unprofitable sheep on their farms, and which they regard as a kind of *necessary evil*, for the improved breeds, which are now being raised with such success.

Subjoined I give you the proceeds from a ewe I had slaughtered on the first December last, it being the least profitable of my flock:

Gross weight,	200 lbs.	
Net "	132 lbs,	at 7c per lb, \$9,24
Tallow "	40 "	10c " " 4,00
Hide, wool on		2,00
		\$15,24

ROBT. McMILLAN.

*Bourbon County, Ky.*

[Written for the Valley Farmer.]

#### MISMANAGEMENT OF HORSES.

MESSRS. EDITORS:

In endeavoring to convey my ideas in regard to the management of horses, I believe there is probably no method by which the advantages of good management can be so clearly shown as by noting the evils of mismanagement. Causes of disease previously unnoticed or disregarded are thus exposed to view and their injurious influences ascertained; attention is thus directed to the preventive treatment of disease, which is invariably more certain and satisfactory than the remedial treatment, besides being of much higher practical value, since it affects numbers in place of individuals and when thoroughly studied leads to the adoption of extensive and sanitary improvements.

The diseases occurring by bad management of horses are exceedingly numerous and sometimes very severe. They may supervene immediately after an error in management has been committed, but more frequently spring from weakness and susceptibility to disease produced by continual neglect or error. Thus a single instance of abstinence from food, or exposure to rain and cold, seldom produces in a healthy animal any permanent evil, but when such instan-

ces become frequent, they soon begin to develop their injurious consequences. Mismanagement may frequently be long continued before its bad effects become at all apparent. Thus insufficient food, overwork, and insufficient shelter, require a considerable time before they produce even their earliest effects, but in proportion as these effects are slow and imperceptible in their development, they are more to be dreaded, on account of the ravages they may make before being detected or arrested. Any single cause of disease is greatly strengthened by the cooperation of other causes. For example, deficient ventilation or want of cleanliness materially aggravates the evils resulting from hunger, overwork, or exposure to wet or cold; and again overwork and want of shelter are much more severely felt by ill-fed than by well-fed animals. (By insufficient food we understand food insufficient either as to quality or as to nutritiveness.) I shall use the term in this two-fold sense. It will, however, be obvious that these two forms of insufficient food produce similar effects and that both operate injuriously by reducing the strength and general vigor of the system. Under either system of starvation, horses become lean and miserable looking, their bellies flat and their quarters thin and angular, their skins adhere to their ribs and infested with lice and other vermin, and their hair rough and coarse. Their strength and spirit also fail; they are unfit even for moderate exercise, and are dull and spiritless. These are the consequences of insufficient food with which, on account of their comparatively frequent occurrence, we are most familiar. When, however, the defective feeding is still more excessive, or of longer continuation, or when its injurious consequences are aggravated by other errors in management, it leads to still greater evils, some of which may be here enumerated. The gradual removal of the fat and shrinking of the muscles produce extreme emaciation, the digestive system loses its tone, and diarrhoea, and even dysentery appear, which rapidly reduce the fast failing strength. The blood is thin and watery, and passes through the walls of its vessels, causing swelling in various of the dependant parts of the body, as in the limbs and about the sheath. This impoverished state of body especially favors the production of two very serious diseases, namely, tubercular consumption and glanders. These affections owe their origin to similar causes, their existence indicates a deteriorated and vitiated state of the blood, and their cure is all but hopeless. Food may be improper on account of an excess of quantity, over

nutritiveness or bad quality, and under these several heads we propose noticing the subject of improper food. An excessive quantity of food consumed at one time is very apt to produce immediate bad consequences, as colic, enteritis, laminitis, and occasionally from the great distention generally present in such cases, rupture either of the stomach or intestines. Affections of this kind frequently occur amongst farm horses from the large quantity of food consumed after protracted abstinence, or from their getting loose during the night and gaining access to the corn chest. In such cases food is consumed to an amount so unusually large that it is only very partially digested, in this process it soon undergoes chemical change and becomes a source of irritation and the intestines endeavor to relieve themselves of their load by those violent spasmodic contractions, which form the characteristic symptoms of colic. The irritation, however, is sometimes so excessive that unless natural or artificial aid be afforded, inflammation is set up. Frequently, too, the sensitive and vascular laminae of the feet become inflamed, constituting *laminitis*, or acute founder.

Food is occasionally given to horses in a state of bad preservation. The common error of this nature is the use of heated or musty oats, corn, or hay. Such food, by irritating the intestines, often gives rise to indigestion or diarrhoea, or, by stimulating the kidneys, produces diuresis and diabetes. When from bad preservation, or other causes food is of a very defective quality, and forms for some time the whole or a great portion of the diet, it causes all those evils above noticed as resulting from insufficient food. Horses fed for a length of time on large quantities of rich and stimulating food are very liable to enlargement of the liver. Such food requires for its proper digestion very large quantities of bile, and to meet this constant excessive demand the liver gradually becomes increased in size. From the stimulating nature of their food, brewers and distillers horses in particular are very frequently affected with the enlargement of the liver, and I have known of several cases in which the enlargement and softening of that organ were so great as to cause rupture and death. To preserve horses in good health and vigor, their food must be of sufficient quantity and nutritiveness; it must be given at short intervals, it must not be too large in quantity, or too rich in quality; it must be in good preservation, and it must be changed with care and by degrees.

**Overwork.**—Where animals are habitually overworked, especially when at the same time, subjected to a deficient system of diet, bad housing or the breathing of impure air, it speedily and certainly reduces their strength and vigor and becomes the exciting cause of some disease, and the predisposing cause of others, the evil consequences induced occasionally occurring during the undue exertion, but more frequently some time after. The evils in overwork are very remarkable in young horses, that is, in animals below the age of five or six, because their strength and power of endurance are not so great as in adult life, and their bones muscles,

and all other structures are still growing rapidly and want firmness and solidity. On this account hard work or any other depressing agent produces its effects more speedily and certainly before than after maturity. In some parts of the country it is the practice to put horses to work much too young, often many months before they are three years old. Those who adopt this practice generally advocate it on the principle that the animals require exercise, and that such exercise is beneficial to their growth. This is certainly undeniable, but the exercise to which the young horse is subjected, is constant and unremitting toil and not the healthful beneficial exercise which he requires and which he would naturally take. In consequence of such mismanagement, when the animal is five years old, instead of being healthy, vigorous, well formed and full of animation, he is a miserable, jaded, worn out, dull and spiritless creature, his limbs weak and probably misshapen from injudicious wear and tear, his spirit crushed by the hard usage received in urging him to tasks to which his strength was unequal, and if not absolutely unsound, his debilitated constitution renders him an easy victim to many serious diseases. In short from an ill-judged economy, too often the cause of such mismanagement, a few months work is gained at the expense of years of good service, and a useful animal is virtually rendered aged before reaching maturity; for certain it is that undue work during early life and before the animal is fit for it, brings on premature old age, nor do we think we over estimate the evils when we say that a year of future usefulness is lost for every month that the colt works before he is fit for it.

**Insufficient shelter** acts injuriously on all animals, chiefly by exposing them to sudden changes of temperature and to the influence of excessive cold, winds, rain and storms. Animals in good health and abundantly supplied with food do not suffer much inconvenience even from very great cold if unaccompanied by moisture. Of this we have sufficient evidence in the fact that horses, as well as other animals, living at high altitudes, and in climates much colder than ours, enjoy unimpaired good health. "The cooling of the body," says *Liebig*, "by whatever cause it may be produced increases the amount of food necessary." Sheep exposed to the inclemency of the winter weather eat much larger quantities of food and fatten more slowly than those in sheltered situations and receiving the same kind of food. The milk yielded by cows is often much diminished if the animals are exposed to cold, even for a short while. Indeed amongst all animals the effects of cold are gradually aggravated by insufficient food. Shelter may be insufficient either from the exposed position of pasture-lands or of farm buildings, or from the faulty construction or bad repair of the stables or sheds in which animals are housed. Disease is thus often produced in small and badly constructed stables. These, from being over crowded, and from want of appliances for efficient ventilation, often become overheated, and to remedy this evil the doors and windows are thrown open, admitting currents of cold air.

The previously heated, and it may be fatigued condition of the animals, predisposes them to suffer from this mismanagement, and many serious and fatal catarrhs, bronchitis and pulmonary affections are traceable to such errors. To conclude, we may remark, that insufficient shelter may be considered as the special exciting cause of all affections of the respiratory organs and of all rheumatic inflammations, and a powerfully predisposing cause of almost every disease. It causes an unusually great consumption of food, and even with the most liberal diet good condition is rarely attainable.

J. W. FAIR.

### Winter Care of Animals--Horses.

We advert to this subject thus early for the reasons that, many spare moments may be at the disposal of the farmer ere the snows and frosts of winter come upon us, and because the habitations of domestic animals should be fully and comfortably prepared for their reception long ere necessity compels them and us to seek a shelter.

The first requirement in the winter care of horses is a good stable. The choice of situation, and there is a choice, is an important item. A high and dry spot, or one that will admit of drainage, is as necessary for this purpose as for the house of the farmer. Stables should be dry. Damp stables are productive of as many evils as damp houses, in fact many of the most violent diseases to which the horse is subject are often attributable to this one defect. Shelter from cold and bleak winds is another desideratum which should receive attention. Stables should also be easy of access—here, however, the farmer consults his own comfort, and on this point it is unnecessary to dilate.

The second necessity is that the stable should be of good size. Not unfrequently horses are crowded into space so small as to be not only extremely uncomfortable for them, but highly injurious to their health. Stables thus crowded undergo sudden and remarkable transitions of temperature—the air becomes so heated that the animals are almost constantly in perspiration, and on being taken out to perform work are immediately chilled; and colds and coughs soon produce their ultimate and inevitable results.

Another want and a very great one is windows. Dark stables are undoubtedly injurious,—if they were not, the necessity that will at times arise for light to render aid to animals that may get cast or injured, periods when prompt and efficient action is needed, demand a reform in this respect.

Again, proper and thorough ventilation should, in the construction, be one of the prime objects sought. Man sees the necessity for a circulation of air in his house, where breathing is the only thing that destroys the purity of the atmosphere,—how much more necessary is it in the home of the horse, where the emanations from the surface of the body, the manure and the urine, all mingle with it and taint it.

Having provided comfortable quarters, the duty of supplying them with a sufficient quantity of good food, and that at regular intervals, devolves upon the keeper. For many years ex-

periments have been in progress with the purpose of ascertaining the kinds best adapted to the wants of the animal at this period of the year. Persons differ as to the relative value of many articles, yet all agree that variety is essential. Oats are not the only food that will fit a horse for labor or the road—roots are oftentimes much superior. Carrots are perhaps the first in this class—and are noted both for their action upon the internal organization and in an improved external appearance. A loose, mellow hide is observable in all animals where this root forms a portion of their food. In this connection it may be proper to say, that every barn should have a hay or straw cutter, and that the instrument should be kept in daily use. Every method by which the digestion can be improved, ought to be resorted to—for the stomach is the great furnisher of motive power, and should the steam go down locomotion is impeded or brought to a full stop.

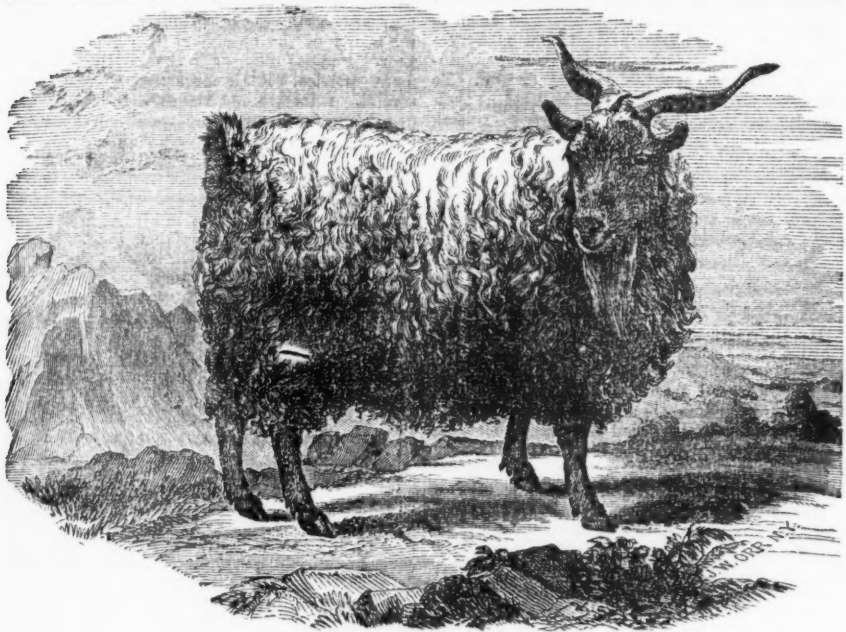
Regularity in feeding is a thing that must not be overlooked, if we aim at doing everything in our power for our stock. Every farmer can recall in his own experience numerous times when he

"Moodyly has listened long,  
To hear the dinner horn."

And knows, however tired previous to the welcome sound, with what alacrity has been "laid down the shovel and the hoe," and the most direct course taken for the well spread board. Animals possess some humanity in their composition, and if it can be discovered nowhere else, it is readily found in the stomach. Once more we would repeat feed and water regularly.

The cleanliness of the horse is indispensable to the preservation of his health. Stables with every appliance of comfort, food in abundance and of the very best description—if every want be supplied—without the animal and his quarters are cleaned daily and kept so it is of no avail. In addition to enhancing external appearance, there is but little doubt that the friction caused in the process of cleaning is promotive of the well being of the animal. The hair of the well-cleaned horse is soft and oily, and consequently it better fits him to withstand the cold rains so frequent during winter and early spring. The anointing matter is conferred through the agency of the skin, and this secretory process is doubtless augmented by good grooming. In the horse that is seldom or never groomed the hair stands in all directions, is rough and harsh to the feel, and in addition he has a dull and sickly look. Sooner or later mange will manifest itself in an animal thus cared for, and the sympathy of the outer with the inner organization, will rapidly affect the entire system.

Each department of the animal economy ought to receive its due proportion of care and attention, and must, if we expect the entire system to be benefitted. Let carelessness infringe upon the wants, in any one particular, and the detriment of all will be the result. Temperance, purity of the atmosphere, quantity and quality of food, in fact everything that will redound to the animal comfort, is worthy of the closest scrutiny on the part of the owners of horses.—*Wool Grouser.*



MALE CASHMERE GOAT.

The property of Richard Peters, of Atlanta, Georgia, imported during the year 1849, from Turkey in Asia, by J. B. Davis, M. D., of South Carolina. Live weight 155 lbs., weight of yearly fleece, 7 lbs.

#### CASHMERE GOATS.

These beautiful animals, which the accompanying cuts represent, were imported into the United States in 1849 by Doctor J. B. Davis of South Carolina. From these a number of animals were bred. Three of the females were subsequently sold, one to Col. Wade Hampton of South Carolina; one to Mr. Davenport of Virginia; and one to Mr. Osborne, of New York, and several bucks were sold to gentlemen in Tennessee, Georgia and South Carolina.

In 1853 Dr. Davis sold the remainder of the flock (twenty-five in number) to Col. Richard Peters of Atlanta, Georgia.

Many opinions have been expressed not only as to the particular variety to which these animals belong, but also as to their value and adaptation to the different sections of the Union. With the view to elicit opinions from distinguished stock breeders Col. Peters exhibited a number of these animals at the late show of the United States Agricultural Society at Philadelphia.

That they are not the "Thibet Shawl Goat," is proven by their total dissimilarity to a specimen of that breed now in the possession of Col. P. The latter variety having only an under-

coating of a few ounces—which portion of its fleece is alone valuable.

They also differ from the common Angora Goat of the province of that name in Asiatic Turkey, as that animal is of varied color, with a fleece of indifferent value.

These animals have become known as "Cashmere Goats," from the pure white color and firmness of their fleeces, and their undoubted Eastern origin, having been characterized by the celebrated American Naturalist, the Rev. Jno. Bachman, D. D., as "the most valuable variety that can be introduced into our country."

Col. Peters informed us that the fleeces of the matured bucks weigh from six to seven pounds. Ewes yield from three to four pounds. The flesh of the carcass is said to be superior to most of the mutton sold in our markets, being tender and delicious. They are easily kept, living on weeds, briars and other coarse herbage common in the Southern States, and will undoubtedly thrive better on lands more adapted to the grasses. They are also said to be better able to protect themselves from the attack of dogs than sheep are. They are said to be free from all diseases to which sheep are liable, and are hardy and prolific.

We have been furnished with a specimen from





FEMALE CASHMERE GOAT.

The property of Richard Peters, of Atlanta, Georgia, imported during the year 1849, from Turkey in Asia, by J. B. Davis, M. D., of South Carolina. Live weight 162 lbs., weight of yearly fleece 4½ lbs.

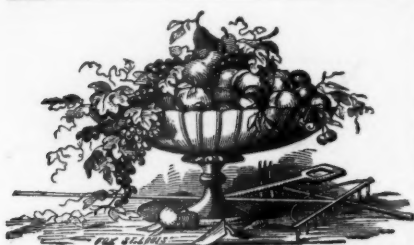
the fleece of one of these animals, which is very beautiful. Col. Peters exhibited at the fair at Philadelphia three pure buck kids from five to eight months old, also two buck kids, five months old; one of which is 7-8 cashmere, 1-8 common, showing the third cross of the Cashmere on the native goats of the country, the other is 3-4 cashmere, 1-4 common, showing the second cross. Also a yearling Ewe, half breed cashmere, showing the first cross. The mother of this specimen being a common blue goat.

#### ENGLISH CATTLE.

It is said by M. Richard in the *Paris Siecle* that at the great Paris Fair the English cattle took the lead. The Durhams, Ayreshires, Herefords and Devons, were there on show and all made a fine appearance. But he gives the preference to the Angus breed. There were thirteen males and 26 females of this breed on the grounds and all bore a remarkable similarity of character. He thinks they will supercede the Durhams. They are from the counties of Farfar and Kincardine; are generally without horns, of different colors but mostly black with white spots.

STATES OF BODY AND MIND MOST CONDUCTIVE TO RAPID FATTENING IN ANIMALS.—*Health, rest, ease, warmth and tranquility, plenty of fattening food, (never too much at once,) at first, exercise, to keep strong the appetite, opportunity to drink freely, when not eating, and absolute cleanliness.* When these conditions are met, almost any animal will fatten fast in the pasture, or in the stall. Moderate exercise such as that of grazing in the pasture, promotes juiciness of the flesh and the formation of fat among the muscular fibres. Oily and fatty food is more fattening than that of a starchy or saccharine character, though they have a similar elementary composition, consisting of carbon with the elements of water. The fat forming portions of food are in part consumed in maintaining the animal heat, and in proportion to the contrast between the temperature of the air and that of the animal, is more or less food necessarily used for this purpose, that might go to the formation of fat if the animal were warm.

Stall fattening proceeds much more rapidly when the light is as far as possible excluded—owing to the effect of darkness upon the mind of the animal—entire, or the greatest possible serenity, or tranquility is the result, surrounding objects not arresting the attention or causing restlessness being kept out of view.



## Horticultural Department.

### Horticultural Department of the United States Agricultural Exhibition.

In the present number we have given in another place some account of the great National Agricultural exhibition, held at Philadelphia during the week commencing on the 7th of October.

The former exhibitions of this society have been confined exclusively to live stock, but the managers of the fair of 1856 very wisely embraced in their list of premiums all the articles usually exhibited at our State and local fairs.

Philadelphia is situated in the midst of a highly cultivated and fertile region. The liberal premiums offered by the society for the various products of the soil, and particularly for fruits and vegetables, called out a most excellent display in the horticultural line. The season there, having been much more favorable in respect to rains, than in most other portions of the country. The fruit and vegetable products, under the most improved system of cultivation, were very superior. There was a large collection of all the various garden products, of as large size as we have ever seen. The fruits, embracing almost every variety, from the gardens immediately in the vicinity of Philadelphia and from remote States, were of the best quality. The display of Pears was particularly good. We noticed some of the Duchesse d'Angoulême that weighed from 21 1-2 to 23 1-2 ounces. Also Seckels of extraordinary size.

From the long list of premiums awarded we select the following:

**Apples.**—For the largest and best exhibition of apples, not less than three specimens each, \$50, to John Perkins.

**Pears.**—For the largest and best exhibition of named varieties of pears, not less than three specimens each, Hovey & Co., of Boston, Mass. For the second best, \$30, to Wm. Reid, of Middletown, N. J. For the best thirty varieties, six specimens each, Robert Buist, of Philadelphia. The committee also recommended as

a special premium, \$50, to the Hon. Marshal P. Wilder, President of the society, for his collection of pears.

**Native Wines.**—For the best Catawba, 1855, \$10, to Wm. Haas, Boonville, Mo. For the second best, 1855, Thomas H. Yeatman, Cincinnati, Ohio. For the best dry Catawba (older) \$10, N. Longworth, Cincinnati, Ohio. For the second best, Wm. Haas, Boonville, Mo. For the best sparkling Catawba wine, \$10, to Mr. Werst, Cincinnati, Ohio. Also a premium of \$5 to Charles Kohler & Co., of San Angeles, California, for his Port Wine.

### American Pomological Convention.

The members of the American Pomological Society opened its fifth biennial session in the City Council Chamber in the City of Rochester, N. Y., on the 24th of September and continued three days. There were a large number of members and delegates, amounting to several hundred, in attendance, among whom were some of the most distinguished pomologists in the Union. There were members probably from more than half the States, including California, North Carolina, and all the eastern Atlantic States, also from Ohio, Indiana, Illinois, Kentucky, Iowa and other western States. From Kentucky we noticed Messrs. Hobbs, Walker, and Garr, and from Ohio, Messrs. Ernst, Bateham, and McCullough.

The Convention was called to order by S. G. Andrews, Esq., Mayor of the City, who welcomed the Society to Rochester. The Annual Address was then delivered by the Hon. Marshall P. Wilder, President of the Society, in which he alluded at some length to the progress of fruit culture in the United States, and the means adapted to promote the Science of Pomology.

The time of the Convention was most industriously and profitably employed in the discussion of the various fruits, taking almost the entire catalogue of kinds under consideration, and striking from the list those which have proved unworthy of cultivation, and revising the list of those passed at former sessions of the Society, and enlarging the list of those worthy of general cultivation. As the fruits discussed were generally those of Eastern origin, and most of the speakers were residents of the Eastern States, this last list will require some considerable modification for certain localities: for instance, some of the varieties voted as adapted for general cultivation are not altogether suited to the soil and climate of Kentucky and Missouri, while in those sections of the West there are many other varieties perfectly adapted to our culture, not included in this list.

In a future number we shall give the most important portions of the discussion, with such comments upon certain fruits as our immediate locality may seem to require.

From the great interest that was manifest at this Convention, upon the subject of Pomology throughout the country, we may expect that the sphere of its influence will be extended throughout the entire land, until the large number of most valuable varieties, now only known in particular localities, shall be disseminated and their merits generally known. This will require time, and that period is fast approaching when our list of fruits shall be greatly improved, and our knowledge of fruit growing vastly increased and extended.

The collection of fruits from the various sections of the Union was large and the specimens very fine. Of Apples, there was a large number of varieties entirely new to us, and some excellent specimens from North Carolina.—Those also from Iowa, were remarkably fair and beautifully colored. There was a collection from the grounds of Mr. Austin Pinny, an amateur cultivator of Clarkson, Monroe county N. Y., embracing pears, peaches, plums, and foreign grapes, which was worthy of special notice as showing to what a degree of perfection the culture of fruits may be carried with a little intelligence and care.

As Rochester may be regarded as the grand pomological centre of the United States, the interest of the occasion was greatly increased by the annual exhibition of the Horticultural Society of the Valley of the Genesee, in connection with the show of fruits of the Society.

Peaches, for a short period, have been abundant about Rochester, but at this time they were nearly out of season, though there were some excellent dishes on the tables. Among the largest contributors of Pears and other fruits, were Messrs Ellwanger & Barry. Mr. Samuel Walker of Roxbury, Mass., brought 20 varieties of Pears. Hon. M. P. Wilder, of Boston, furnished 100 kinds of Pears, and Messrs. Hovey & Co., of Cambridge, Mass., 150 kinds, and more or less by a large number of other contributors.

The following are the officers reported by the Committee appointed for the purpose, and who were unanimously elected for the next biennial term of the Society:

PRESIDENT,

HON. M. P. WILDER, of Boston.

VICE PRESIDENTS,

S. L. Goodale, Me. D. W. Yaudell, Tenn.

H. J. French, N. H. Lawrence Young, Ky.

Fred Halbrook, Vt.	A. H. Ernst, Ohio.
Samuel Walker, Mass.	H. L. Ellsworth, Indiana.
Stephen H. Smith, R. I.	C. R. Overmann, Ill.
A. S. Monson, Conn.	Thomas Allen, Mo.
Charles Downing, N. Y.	Rev. C. H. Byington, Ark.
William Reid, N. J.	B. F. Nourse, Fla.
Hartman Kuhn, Jr., Pa.	Robert Avery, Iowa.
Wm. C. Wilson, Md.	J. C. Brayton, Wis.
E. Tatnall, Jr., Del.	Simpson Thompson, Cal.
Yardley Taylor, Va.	Joshua Pierce, D. C.
Joshua Lindley, N. C.	Edward Hunter, Utah.
A. G. Summer, S. C.	Hugh Allen, C. E.
Richard Peters, Ga.	James Dougal, C. W.
C. A. Peabody, Ala.	Amassa Stewart, Minn.
Thomas Affleck, Miss.	C. B. Lines, Kansas.

Henderson Lewellyn, Oregon.

Secretary,

P. BARRY, of New York.

Treasurer,

P. JAMES, of Pennsylvania.

The Convention adjourned to meet in New York in the fall of 1858. The day and place of meeting will be duly announced by the President.

### CATAWISSA RASPBERRY.

This is a new native ever-bearing variety, resembling in its growth, the Ohio ever-bearing plant, but the fruit of the Catawissa is red, tender and more pulpy, and far superior to the Ohio variety, which is black and lacks both pulp and sweetness, when compared with some of the spring sorts.

We saw specimens of this new fruit on the tables at the meeting of the American Pomological Convention, at Rochester, and also at the fair of the New York State Agricultural Society, in 1855. From the appearance of the large bunches of fruit that we have seen we should regard it as an acquisition.

Of the origin and history of this new plant we have gathered the following facts: The original plant was discovered in a little grave yard near the Quaker meeting house, in the village of Catawissa, Columbia county, Pennsylvania, situated near the confluence of a stream of the same name, with the Susquehanna river. The person who had charge of the meeting house who was in the habit of mowing the grass in the grave yard, discovered this plant, then at an unusual season, bearing fruit. This fact induced him to spare it, and he afterwards removed it to his garden.

The fruit is of medium size, not equal in quality to many of the new spring varieties, but from its tendency to bear during the latter part of the season, will render it a novelty of some value to the amateur. Its color is dark-redish, or nearly of a purple, when ripe, and of good flavor. It is said to bear most abundantly

through the season after the young wood on which it produces its best fruit attains a height of four or five feet, usually beginning to ripen early in August, but sometime sooner. The fruit is produced on branches continually pushing out from all parts, successively appearing in its various stages of growth, from the blossom to perfect maturity, like the Ohio ever-bearing kind.

To be successful with either of these varieties the soil must be rich, and well trenched, in order to give a strong, vigorous growth to the plants, and in order to guard against the effects of drouth, which frequently occurs at the time the fruit is forming; the entire surface of the ground should be covered with straw or old tan bark to the depth of four or five inches.

#### Tree Growing Around Rochester.

The nursery business is carried on in the vicinity of Rochester, N. Y., in greater perfection and to an extent far exceeding that of any other locality in our country. It has become a central point for the purchase of trees for almost all portions of the Union, not that the soil or climate of this place possesses advantages over hundreds of others, which has caused so extensive a business to be carried on in this line, but because it has been established here and is properly conducted, generally by men of intelligence, industry, enterprise and integrity, consequently the place, in this respect, has become more widely known, and trees are sent to a greater distance than from any other point.

As near as we could ascertain, the quantity of land occupied in this branch of cultivation around this centre, is about 2000 acres. Included in this is the extensive nursery of Messrs. Elwanger & Barry, who cultivate between 300 and 400 acres; 275 acres of this is fruit trees, the remainder in ornamental trees and plants, including 15 acres in specimen trees. All fruits that are propagated here, to any extent, are first proved in the specimen grounds. The propagation of the different varieties of currants, among the many other fruits, occupy a considerable space; at least four or five acres are devoted to this department.

While attending the sitting of the American Pomological convention at Rochester, we, with a number of delegates from different parts of the country, were invited to visit this establishment, by the gentlemanly proprietors, who provided carriages to take us out. Every branch of cultivation is here carried on in the most systematic and thorough manner, which would se-

cure the most complete success in any department of Agriculture.

To witness the number of trees grown in this vicinity, some persons are led to suppose almost the entire demand of the country could be supplied from it. The mistaken idea that the country is to be overstocked with fruit, has prevented thousands from engaging in fruit growing, which has caused a great scarcity and high prices of all kinds of fruit in our market.

The rapidly increasing railroad facilities have opened a wide and extensive market, that ten or twenty times the fruit now grown, could not supply. The supply in any market absolutely begets a demand, for what one class of citizens buy, others want and will have, to a greater or less extent, so that the price of most kinds of fruit will for many years increase throughout the country.

Besides the fruit trees furnished by the Rochester nurseries, there are many other points where they are extensively grown, and if all of these were planted in the State of New York, it would be many years before the supply would equal the demand. It is therefore important that our western friends should grow trees more extensively for themselves. Cultivators are now beginning to awake to the importance of this business, but they have yet much to learn in regard to successful orcharding. Thousands of trees that have already been planted, have been but imperfectly done, and the subsequent cultivation too much neglected. Trees, to be healthy and beautiful, not only require a proper soil, but as constant and thorough cultivation as any annual crop.

**APPLES FOR EXPORTATION.**—There is an annual increasing demand in New York and other sea ports for apples for exportation. The Newtown Pippin appears to be the favorite variety for this purpose, though the Baldwin and Roxberry Russet are exported to some extent, but the Newtown Pippin is of that firm texture that it bears shipment better than any other variety, its quality, too, in England, as well as in this country, is regarded as superior to most other kinds. It is estimated at least *ten thousand* barrels will be shipped from New York this fall. One firm has already made contracts in England to supply six thousand barrels, so that all of the best quality of that variety will be bought up as fast as they arrive in market up to the 1st of December. In packing for shipment, each apple is rolled in a piece of paper, which prevents rotting and retains the firmness and fragrance of the fruit. Apples put up in this way bring from



\$6 00 to \$8 00 per barrel, and in the market of England they often sell for \$16 a barrel.

To grow the Newtown Pippin to perfection a peculiarly deep, strong soil is required, and where the soil is suited to them, there is no apple cultivated more profitably.

#### TREE SETTING.

It is a question with many whether fruit trees should have a shallow or a deep setting. With us it seems clear that either extreme is objectionable. But if we are to vary towards either, it should be towards deep setting. In shallow setting, the roots will in a few years become exposed to the heats and colds of the seasons, which must prove injurious. We have observed that natural trees strike their roots deep, where the soil and sub-soil will permit, and they are seldom much exposed in after years. We have seen large forests of the heaviest timber in the West where whole acres might be searched and not be seen exposed. In shallow soiled countries the roots of trees become exposed. In our country we think it evident that the roots want to go below direct exposure to the blasts of winter and the suns of summer. In a deep, well drained soil, somewhat deep setting must be best. Probably it will not produce fruit quite so quick, nor quite so rapid a growth of the trees, but they will be likely to live longer, and be of more service in the end.

#### GUARD YOUR FRUIT TREES.

The extreme cold of last winter, followed by the severe drouth of the past summer, has shown the importance of guarding fruit trees with mulch, straw or something of the kind spread several inches over the ground under the trees. Especially should young trees be thus protected. There are many advantages in it. It protects from the frosts of winter and the drouths of summer. It preserves the temperature of the climate in the soil about the roots, more nearly through the whole year. It enriches the soil, and it is possible it may protect the soil from some insects. The past year may have been a discouraging one to many fruit growers, especially those who have just commenced with ardent hopes. But they must remember that such years do not come often, and so must try again. They must remember, also, that the most of them have done nothing to protect their young trees from the calamities that have befallen them. Let them be of good cheer, and put out their orchards all over the country, remembering to profit by the past, and hoping for the future.

#### Strawberry, Asparagus and Pie Plant Beds.

Those who have been so unwise as to set their strawberry plants the present fall instead of spring, will do well to give the ground a good covering of old broken straw, or leaves from the woods; if neither of these are convenient, old tan-bark will answer, but we greatly prefer either of the former. Old stable manure containing a large quantity of straw is also very excellent, if it can be procured free from the seeds in the hay, but this cannot always be had. The mulching protects the young roots of the plants from the effects of the severe frosts, prevents the plants from being drawn up by the thawing and freezing, and keeps the ground from being packed by the beating rains of winter.

Old beds or those that were planted in the spring, should also have a light dressing of one or the other of these materials, and no time should be lost in making the application. These fall dressings will cause the plants in the spring to start with more strength and vigor and to yield a larger and better crop of fruit.

Asparagus beds now require cleaning off, by cutting all the weeds and old stems of the plants and carefully raking and sweeping off the seeds that fall, that they may not vegetate in the beds and form new plants to the injury of the old roots. After the beds are thus cleaned off, a good coating of stable manure should be spread over them to remain until spring, when the coarser parts should be raked off and the remainder be carefully forked under. This treatment is indispensable, if a good, permanent bed of strong plants is expected.

The Pie-plant should be treated in a similar manner, only the manure should be applied more liberally, and should be placed more directly around every plant.

#### FALLEN FRUIT.

No fallen, unripe fruit should be permitted to decay on the ground under or about the trees. The reason is simple. Fruit that drops off before it is ripe, does so because an insect is in it which has diseased it. The insect matures in the fallen fruit and rises to infect the tree or leave its larvæ for another crop of its kind.—Fruit growers cannot be too careful in gathering the fallen fruit, that the grounds beneath their trees do not become insect nurseries—that their orchards do not become swarming households for the insect tribes. Animals should be guarded against lice and orchards against insects.

## The Home Circle.

### ESSAYS ON HEALTH---No. 3.

#### PARTICULAR CAUSES OF DISEASE---MENTAL DISQUIET.

Among the particular causes of disease should be enumerated those of a mental character.—The body bears relation to mind. It is linked with and subject to mind; the mind rules it with an iron tyranny. Either the intellect, the passions, the affections, or all, bear a tyrannous sway over it. Sometimes the intellect, athirst for knowledge, ambitious of scientific gain, greedy in the pursuit of its wealth, subjects the body to all kinds of hardships, drills it, works it, wearies it, cheats it of rest, sleep, and nutriment through years of research, study, business or toil, till the body is worn, emaciated, robbed of its life-principle, and only fit to die. This process of feeding the mind at the expense of the body, is one of which nearly all schools and colleges are guilty, of which most of the professions are guilty, and concernig which charges can be laid at the door of almost every kind of business. It is an evil especially peculiar to our age. Young America loads down the intellect, puts on all the power and breaks down the bodily car in the morning of life. Our country is all strewn over with the wrecks of this evil. It is a hot-house culture of the mind; a kind of electrical application of power to develop mind and secure results before their time. We do not object to hard study; it is the making of minds. We approve of strong and continuous effort; it strengthens the nerves and hardens the muscles of mind. We recommend vigorous mental application; it gives stature and power to the inner man. But we object to doing it at the expense of the body. We object to wearing out the body before it is time, in this process. The mind should always be used with a view to its relations to the body; and as the body is formed with relations to mind, we doubt not that a rich mental culture is favorable to the health of the body. If mental culture is kept up near to the limit of the bodily strength, we doubt not that it is favorable to health and long life. The most cultured men often live to an advanced age. Scholars, philosophers, statesmen, often wear the frost of four-score years.

For strong health, for vigorous physical powers, mind should receive a wise and vigorous culture. The nervous system acquires strength by the judicious culture of the mind. Schools, study, books, learned professions, mental pursuits are favorable to health under the direction

of enlightened judgement. But all mental exercise should be so ordered as never to exhaust the physical powers—as never to pale the cheek, wither the muscles, oppress the spirits or interfere with the health-operations of the body.

Beyond actual mental exertions, there are many mental causes of ill health. Disquietude, despondency, care, anxiety, affectionate solicitude, wounded pride, wounded affections, disappointment, sorrow, grief, and many other states of mind long suffered, actually derange the healthy operations of the body. They lower its tone and weaken its powers.

Mental cheerfulness—a free and easy spirit, is the great antidote to all maladies from such causes, one absolute essential to health. The burden of a heavy heart is very great. From observations of many years making, we cannot but think that mental unrest and over-exertion in all its various forms, is one of the primary causes of the present low state of health and shortness of life in all civilized communities. One fact bearing on this point is worthy of notice. It is, that the average age among the Society of Friends, or Quakers, is said to be one-third longer than among other people. The great distinction between them and the world at large, is their superior intelligence and calmness of mind. Though people of thought, they are proverbially people of calm and cheerful spirits.

#### WANT OF REST AND SLEEP.

As intimately connected with the cause of ill health we have just pointed out, we would speak of a want of sufficient rest and sleep as a fruitful cause of early decay. Ours is a fast age.—Wisdom, wealth, fame, fortune and many other things must be obtained in red hot haste. Long days and short nights, many working and few resting hours, is the order of our time. Pleasure, toil, and study, all reach far into the night. God's use of day and night is materially modified in all towns and cities, and too often in the country. Late hours and little rest has unstrung many a strong farmer. Sleep, is "nature's great restorer" of the body's wasted powers. Let the night be given to rest and sleep, and the day to its duties or pleasures, and it would do much for the wasted energies and failing health of the civilized world. Sleep will often cure when drugs and drams will only kill. Give children sleep, the youth sleep, and all the weary ones sleep, as much as they want, and give it to them regularly, in its proper time and place and it will restore many a weakly and worn one, and preserve the health of multitudes more. Sleep through the hours that God has

dedicated to that restoring mystery, if you would be sound in body or mind. \*

### YOUNG MEN PAPERRS---NO. 8.

#### TREATMENT OF YOUNG WOMEN.

How to treat young women should be one of the questions that should occupy much of every young man's mind. They are not to be treated as dolls, as playthings, or pets, for they are something more. He who looks upon them as such is himself frivolous and light minded. He lacks the right estimate of women, does not comprehend what is manly in his own relation towards them. And yet puerile as it seems when seriously considered, there are multitudes of young men, and old men too, who treat young women as though they were only pets to be dandled and fondled and fooled with, as though they had not good sense and were not reasonable creatures. Let there be a company of young men enjoying an intellectual, or business, or moral, or political, or any sensible conversation, and let a half a dozen young women come in and they will of one accord, give up their sensible talk and enter into a rigmarole of nonsense and flirtation, of gossip and foolery, by which nobody is benefitted and nobody really pleased.

Young women are not only more than pets, but they are more than children. They are endowed with reason and judgment and good sense. They see into men and things as sharply as men themselves. They comprehend and enjoy a sensible conversation as well, and woe to the luckless wight who thinks to the contrary. He will find out some day his mistake. He will get coquetted, jilted, or henpecked, or taken in some way and taught better than to deem his female associates only children.

They are to be treated as equals in intelligence, worth, position, attainments and capacity, not as men, but as women, whom every law of honor, every principle of affection, every sentiment of respect, every feeling of manhood calls us to treat with the kindest and most generous regard. We are to give them our confidence, have confidence in them, honor them as gifts of God to men, as our best friends, our truest helpers, our best examples of purity, virtue and heroic moral worth. We are to be their defenders, not their defamers, their unfailing friends, not the insidious enemies of their virtue and happiness, their brothers in love and trust, not their deceivers lying in wait to ruin them. Out upon all young men who do not honor young women with that kind of a respect which will protect and encourage them in the

right. Out upon that low minded suspiciousness which is ever doubting and seeking to prey upon woman's virtue. Out upon all the male enemies of woman's purity, peace and happiness. They are not men; not half men, and not worthy to be called men. \*

[Written for the Valley Farmer.]

### POLITENESS.

"True politeness has its seat in the heart." I believe in this aphorism, and will take it for my text, taking also the liberty to interpret it in my own way.

True Politeness rests upon those internal principles of benevolence, which, when actively exerted, show themselves in unceasing efforts to promote the happiness of all, by the thousand nameless acts, that smooth the little roughnesses in the path of life, and scatter flowers instead.

But to accomplish this, be their seat ever so firmly fixed in the heart, they must not sit idly there. And not only must these principles and feelings be brought into activity, but we must also give a little attention as to the manner of their manifestation. Many excellent and kind-hearted people are not agreeable companions, because their manners are unpleasant. They mean well, but speak perhaps in a harsh, forbidding tone, that gives us pain in spite of our faith in their good intentions. Such persons will often insist that so long as they are doing right, it is their privilege to do it in their own way. Yet by nature we are fitted to perceive and admire the graceful and agreeable as well as the good and wise. True, we are not all equally endowed with natural gifts. One will have less benevolence, or less wisdom, or less grace of manners than another, but the possession of one of these gifts does not give us the right to despise others; it rather enjoins the obligation to make the greater effort for their acquirement.

But I think most who have this deficiency in their natures are painfully conscious of it.—They see with sorrow they have given pain when they meant to have offered pleasure, and feeling in the kindest manner towards others, find themselves constantly by some awkward act, making them uncomfortable. These need not despair; the old adage, "where there's a will there's a way," is never more applicable than to them. Real kindness of heart and sincere efforts to make others happy, will make them more pleasing and better loved than those upon whom nature has bestowed more outward grace, but whose hearts are selfish and cold. There is no one who may not by obeying the natural dictates

of good feeling and heart-felt kindness, become truly polite.

It is true that earnest effort and perseverance may be necessary to accomplish this; some tutoring of hands and feet may perhaps be needful, and especially constant practice of gentle words and ways will alone perfect it.

No one can be truly polite who is not uniformly so. Politeness is not a mere gloss, assumed at pleasure, to conceal ill-nature or ill-breeding.

True Politeness has its seat in the heart; but it radiates thence, pervading and illuminating the whole form, giving beauty to the face, and amiability to the manners. A.

#### How Many Marry and Live.

Young man meets a pretty face in the ball-room, falls in love with it, courts it, marries it, goes to housekeeping with it, and boasts of having a home and wife to grace it. The chances are nine to one he has neither. Her pretty face gets to be an old story—or becomes faded or freckled or fretted—and as the face was all he wanted, and all he paid attention to, all he set up with, all he bargained for, all he swore to love honor and protect, he gets sick of his trade knows a dozen faces which he likes better, gives up staying at home evenings, consoles himself with cigars oysters and politics, and looks upon his home as a very indifferent boarding house. A family of children grow up about him, but neither he nor his “face” knows anything about training them so they come up helter skelter; made toys of when babies, dolls when boys and girls, drudges when young men and women; and so passes year after year, and not one quiet happy homely hour is known throughout the whole household.

Another young man becomes enamored of a “fortune.” He waits upon it to parties, dances the polka with it, exchanges billet doux with it, pops the question to it, gets “yes” from it takes it to the parson’s, weds it, calls it “wife,” carries it home, sets up an establishment with it, introduces it to his friends, and says (poor fellow!) he, too, is married and has got a home. It’s false. He is not married; he has no home. And he soon finds it out. He’s in the wrong box, but it’s too late to get out of it. He might as well hope to escape from his coffin. Friends congratulate him, and he has to grin and bear it. They praise the house, the furniture, the cradle, the new bible, the new baby—and then bids the “furniture,” and he who husbands it, good morning! As if he had known a good morning since he and that gilded fortune were falsely declared to be one!

Take another case. A young woman is smitten with a pair of whiskers. Curled hair never before had such charms. She sets her cap for them, they take. The delighted whiskers make an offer proffering themselves both in exchange for one heart. The dear Miss is overcome with magnanimity, closes the bargain, carries home the prize and shows it to pa and ma and calls herself

engaged to it, thinks there never was such a pair of whiskers before and in a few weeks they are married—Married! Yes the world calls it so, and we will. What is the result? A short honeymoon, and the unlucky discovery that they are as unlike as chalk and cheese, and not to be made one though all the priests in christendom pronounce them so.

[Written for the Valley Farmer.]

#### FASHION.

In looking over and examining the list of the many vain and fruitless desires that constantly pervade the human breast, I find the desire *to be in fashion*, occupying a very prominent and conspicuous position, almost at the top of the list. It certainly is to be regretted, when we consider the origin of fashion, and thoroughly investigate its ultimate results and find that it has no permanent design in view, and will never accomplish anything beneficial to mankind. Its whole foundation and fabric is based upon a glittering show, a costly shadow, propelled by an evanescent breeze of human breath. How often do we hear young ladies remark that “they would rather be out of the world than out the fashion,” clearly indicating submission to the entire control and mastery of a vain shadow. Yes, all their affections, good sense, and noble intellectual powers are under the despotic control of a faint glimpse of the appearance of a shadow of glittering vanity, which when thoroughly examined does not even glitter, but has treasonable delusion beaming forth from every feature of its countenance. Then is it not consummate folly for a great world of nobly organized and wonderfully endowed beings, to submit themselves, with all their noble faculties and god-like qualifications to the masterly and entire control of so delusive and aimless a frivolity.

Fashion only has to say “world remove,” and the world removes, (I have no allusion to the globe but the people that inhabit it, for the globe is not controlled by fashion, but is governed by systematic laws)—and mankind, “deform yourself,” and they lay to and deform themselves with the most loyal obedience,—“prostrate your health and risk your prospects for eternal happiness,” the command is promptly obeyed, and their health is destroyed forever, and their spirits are launched into agonizing woe of eternal duration. What does fashion promise to pay mankind for his services—their arduous, health-destroying labors, that have been so incessantly performed? Nothing! Not one thing. They must do all that, because it has them under its iron grasp—because they are its subjects of ser-



virtude, and must move quickly at its command.

Now kind readers, you who have submitted to this despotic monarch, are you going to continue under his reign? If so, you are not free men and women. And have you not proclaimed that you are free and live in a free country? and yet are servile subjects of fashion. You cannot deny it. Fashion owns you, and you must obey its commands with reverential promptitude.—Fashion only has to say, "place your feet in those boots," (pointing to a fashionable pair of boots) and it makes no difference how ill-shaped or how small they are, your feet must go into them if it stops the circulation of the blood, contracts the feet to the painful endangering of the bones, and produces the most excruciating corns,—king fashion has commanded it, and it must be done. Fashion has only to say, "throw away your hat and get a new one—one like this," and notwithstanding it suits you exactly and is comparatively new, you must throw it away and get the one Fashion says. Fashion says you must turn down your collar; but at first you think it looks more gentlemanly standing, and are disposed to grumble and demur with fashion, but when you think of its powerful sway with which it is able to rule you, you at once submit to its iron grasp. And thus fashion restricts, binds, and subjugates you in all your actions, in all you say, in all you wear and in the manner you wear it, &c. Thus fashion is leading its thousands to an early grave through the dreadful cares of various torturing diseases. And yet they call themselves free men and free women, in a free country, doing as they please,—this certainly is not so; for who desires to linger beneath the painful burden disease during their lives, and go down to an early grave? No one. All would live as long as they can be permitted; then you are not doing as you please, but as your master Fashion says. Ladies, I would merely ask you, if you have ever been benefitted by being in the fashion; if so, how? By lacing yourself until your lungs were scarcely capable of respiration and the blood could not circulate in your veins, and when released in many cases, burst the vessels and ended your lives, and often times brought on consumption, which has no remedy but consignment to the grave? Then you say "you had rather be out of the world than out of the fashion." It will, if you continue to supply its demands, take many of you out of the world and out of the fashion too.

I have never known fashion to accomplish, even begin a good work yet, nor have I ever read of such a thing.

FRATERNUS.

### DOMESTIC RECEIPTS.

**CREAM TARTAR CAKE.**—Half a cup of butter, two of sugar, three of flour, three eggs, two spoonfuls of cream tartar, one do. of soda, dissolved in one teacupful of milk, one tablespoonful of flavoring. Stir together quickly and bake in a quick oven.

**HOW TO MEND CHINA.**—We cut the following invaluable recipe for mending china from an English almanac. It is thus made:

Take a very thick solution of gum arabic in water, and stir into it plaster of Paris until the mixture becomes a viscous paste. Apply it with a brush to the fractured edges, and stick them together. In three days the article can not be broken in the same place.

The whiteness of the cement renders it doubly valuable.

**TO FATTEN FOWLS.**—Set some rice over the fire with skimmed milk, as much only as will serve one day. Let it boil till the rice is swelled out; add a teaspoonful of sugar. Feed the fowls four or five times a day in pans, and give them as much each time as will fill them. Care must be taken that they have nothing sour, which will prevent their fattening. Give them clean water, or milk from rice to drink. By this method it is said fowls may be fattened in four or five days.

**CHEAP LEMON FLAVOR.**—When lemons are plenty, procure a quantity, cut them into thin slices, and lay them on plates to dry in the oven; when dry, put them into a tight bag, or close vessel, in the store room, where they are both handy and agreeable for almost anything.

**MINT SAUCE.**—Many of our country friends do not know what a luxury they deprive themselves of, when they eat lamb, either boiled or baked, without mint sauce. Set a few roots of spearmint in one corner of the garden, and they will soon furnish an abundant supply. Strip off the leaves and chop them fine, add an equal amount of sugar, and cover the whole with vinegar. A small tea-cup full of the mixture is sufficient for a large family. Try this and see if it is not preferable to greasy gravies.—*Ohio Cultivator.*

**HOW TO MAKE TEA PROPERLY.**—The proper way to make a cup of good tea is a matter of some importance. The plan which I have practiced for these twelve months is this: The pot is at once filled up with boiling water, then the tea is put into the pot, and is allowed to stand for five minutes before it is used; the leaves gradually absorb the water and as gradually sink to the bottom; the result is the tea leaves are not scalded, as they are when boiling water is poured over them, and you will get all the true flavor of the tea. In truth, much less tea is required in this way than under the old and common practice.

**LEMON BUTTER.**—Twelve eggs, 6 lemons, 2 pounds of white sugar, 2 oz. butter. Rub the butter and sugar to a cream, beat the white and yolks separate, grate the rinds of the lemons; mix the yolks with the butter and sugar over a slow fire, then stir in the whites and it is ready for use. Set away until cold. It makes a very nice sauce.

## Editor's Table.

The St. Louis editor of the Valley Farmer is still confined to his house by sickness. He hopes to be able to be about in a few days. In the mean time he asks correspondents to be patient.

### THE MISSISSIPPI VALLEY FAIR.

Undoubtedly the greatest Agricultural Fair ever held in the West, was that of the Mississippi Valley Fair, held at St. Louis, commencing on the 13th of October, and continuing six days. Never before has there been such an array of horses, cattle, sheep, swine, and poultry, of agricultural products and implements at any point in the Western country, and we very much doubt whether the East has ever come up to it.

To those who have had the Mississippi Valley Fair in charge it must be a source of great gratification to them to know that their efforts were crowned with such complete success.

Last spring it was a new and untried scheme. Great doubt was entertained as to the propriety of holding the fair this fall. The ground had to be purchased and all improvements made in a very short space of time. At length a majority of the Directors determined that the fair should be held this fall. Much time was consumed in examining the different grounds offered for sale as a site for the fair grounds. At length the present grounds were purchased at a cost of \$50,000. The improvement of the grounds was at once commenced, and those having the fair grounds in charge pushed forward those improvements with an energy scarcely paralleled. Everything was done in the most substantial manner, and there are no Fair grounds East or West that will compare with those at St. Louis.

We have said that the fair held at St. Louis was one of the greatest ever held in the West. But what was it in comparison to what her future fairs will be? It is well known that this season has been a very unpropitious one in these parts for fairs. Our farm products have all been effected by one of the severest drouths the past summer that we have ever known. Add to this that at the time of holding the fair, the Missouri, the Mississippi, the Illinois and the Ohio rivers were all so low as to be almost un-navigable, so that neither visitors, nor stock nor produce could be transported, and we can well imagine that with the advantages of these facilities the future fairs of St. Louis will be among

the wonders of the West. St. Louis is the very heart of this nation—the great central point of the Union, and if agricultural exhibitions can be sustained anywhere, they certainly can be here.

### First Annual Fair of the Kentucky State Agricultural Society.

The Kentucky State Agricultural Society opened its first exhibition at Paris, on the 30th of September. The weather on the two first days was cold, wet and unpleasant, which prevented the attendance of many persons who would otherwise have been present.

The President, Brutus J. Clay, Esq., and the other members of the Board of Managers have devoted much time and labor in making every necessary preparation for a splendid exhibition. The addition of "Industrial Hall," "Floral Hall," and other structures for the permanent display of articles during the Fair, are most important and long needed improvements in the management of Kentucky fairs, which we hope will be followed by other societies in the State.

Notwithstanding the unfavorable weather, there was never a better show of live stock, taking it together, in this country; and of Short-horns, we very much doubt whether at the Royal shows in England, a better collection of Short-horns has ever been seen. The sweepstake ring of bulls contained, among other noble specimens of that breed, six imported animals, when taken together, cannot be surpassed in any country. The show of horses, sheep and hogs was also fine, and other departments generally, were well represented.

Agreeably to previous appointment, at 12 o'clock on the 1st of October, his Excellency, Gov. Morehead, delivered a most excellent and appropriate address, which was listened to by a large and attentive audience.

Notwithstanding the unfavorable weather, the first Annual Fair of the Kentucky State Agricultural Society was a most successful one.—We regret that we are unable at this time to publish the list of premiums awarded.

**CORRECTION.**—Our printers committed a blunder on page 343, by printing the name of F. B. Schutz, instead of F. B. SCHEETS, under the article of "Portable Fences." During our travels in North-east Missouri we enjoyed the hospitality of our friend Scheets and saw the fence of which he speaks. It is certainly one of the cheapest fences we ever saw, and really worthy a patent. We hope our friend will give us a description of his fence and of his manner of making it.

**Early Frost—The Tobacco Crop.**

We have received accounts from various sections of Virginia, Kentucky, Tennessee and Missouri, of the destruction of a large portion of the tobacco crop by early frost. Owing to the want of spring and early summer rains there was not the usual amount of land planted in tobacco, and that which was planted was set late from the same cause, consequently the crop was late, and this being overtaken by frost several weeks earlier than usual, will cut short the crop from 25 to 50 per cent. In Southern Kentucky and northern Tennessee, more than half of the crop has been destroyed. Accounts from Danville, Va., state that not more than one-tenth of the tobacco was housed when the frost occurred. In Logan county, Ky., some of the planters have lost their entire crop. There may be other more favored locations in these states where the frost has not been so fatal, but of this we are not fully advised.

**Scientific Exploration.**

It is with some pride that we note the following fact, which speaks well for the enterprise and research of our young Western sister.

A number of public spirited gentlemen in Iowa, unaided by any State appropriation, have projected an expedition which we trust will result in great practical benefit to the individuals engaged in it, and to the scientific world at large. They have employed several scientific gentlemen, among whom are Prof. FRANCIS, of Iowa, and Prof. N. E. MOORE, late President of the Iowa State Lyceum of Natural History, who have gone to South America to make a thorough exploration of the fauna, flora and geological character of the great Andes range.

We do not know how long it is contemplated that these gentlemen will be absent, but we shall watch their return with no little solicitude.

**CORRECTION.**—We are so situated that it is not always possible for us to read and correct the proof of the articles we write for the Valley Farmer, and it is with extreme regret that we too frequently find errors that escape the notice of the printer and proof-readers. Some of these errors are such that the intelligent reader can readily correct them as he reads; but others appear again of such a character that some readers would as likely charge them to the ignorance of the writer as to the carelessness of the compositor or proof-readers. We have seldom attempted to correct these because our paper appears at so long intervals.

In the Oct. No., on page 301, second column,

read greatly *enraged* the Captain, instead of annoyed the Captain. On page 305, in the article on Hemp, first column, read *pollen* or dust, for *follen*. On page 321, first column, read *Victoria Regia* for *Victoria Regian*. On page 323, first column, read *mazzard* for *maggard*. On page 331, read *breeders* for *herders*.

We are indebted to Jos. L. Stephens, Esq., of Boonville, Mo., for a report of the proceedings of the third Annual Fair of the Missouri State Agricultural Society, containing also the address of Judge Bates on the occasion.

We are also indebted to Mr. Stevens for the List of Premiums and the rules and regulations of the first annual fair of the Central Missouri District Agricultural Society—printed in neat pamphlet form.

**DEATH OF DAVID ROSS.**

It is with extreme regret that we learn of the death of this most valued citizen and friend.—Mr. Ross was one of the most intelligent and highly educated gentlemen in the line of his profession with whom it has ever been our pleasure to become acquainted. Added to his large acquirements, in his private relations he was one of the most amiable of men.

At a meeting of the Board of Trustees of Cave Hill Cemetery, (Louisville, Ky.,) held on the 27th day of September, 1856, the following proceedings were had:

That whereas, David Ross, Esq., late superintendent of the Cave Hill Cemetery, has recently deceased, the Board cannot permit the occasion of their first meeting since that sad event to pass without a tribute to the memory of that exemplary and self-sacrificing man.

Mr. Ross came to this city some years ago, upon the invitation of this board, and, though his singularly urbane and gentle manners won the esteem and confidence of those of our citizens whom the mournful duties of life brought within the sphere of his kind and considerate office, yet the members of this board have had better opportunities of knowing the man, as well in his private dealings as in the discharge of those duties which were seen of the public. The humble position which he held was suited to the modest and affectionate character of his disposition, but it suggested a very inadequate idea of his attainments. He was a native of Ross-shire, Scotland, where he was born in 1814. He was educated at the Horticultural Society's Gardens, near London, and thence went to Cheswick, the noted seat of the Duke of Devonshire; from thence he repaired to Paris, where he completed his studies in the Jardin des Plantes.

In these celebrated schools he acquired that rare knowledge of practical botany and laid the foundation of that taste in landscape gardening which enabled him to combine the beautiful in horticulture with the harmonies of natural scenery. The improvement of Cave-Hill Cemetery is a slight testimonial of his capabilities in this respect. Lovely as that habitation of the dead confessedly is, its beauty is less remarkable than the ingenuity which made it what it is from means apparently so inadequate to its accomplishment. His plans have been scarcely developed before he has himself laid down with those over whom he taught the rose to shed its sweetest fragrance and the evergreen to cast its weird shade. Had it pleased Him, at whose dispensations it is presumptions in man to murmur, to have spared his life for the completion of

his designs, we feel justified in supposing that Cave-Hill Cemetery would have had no equal in the elegance and appropriateness of its arrangements. It was a fancy of his that the grave should be adorned with the emblems of eternal life, and there is no spot known to us where the gloom of death is so tempered by the suggestions of immortality. "He is not dead but sleepeth," is the sentiment felt at nearly every grave. All this was the development of a taste so short lived as to be able to do scarcely more than prepare a fitting resting place for itself.

Mr. Ross, besides possessing natural abilities highly cultivated of decided cast, was a man of generous, noble and sincere disposition. He was as simple hearted as one who thinketh no evil. Nothing discouraged him, nothing fretted his temper. He toiled on with or without support, and at last fell a victim to his devotion to what seemed the object of his life—the completion of the design of the cemetery. He was offered large rewards for his services elsewhere, which was refused; he was urged to travel when his health was declining, but he seemed riveted to the scene of his labors. His heart was there, his mind was there, and now what was mortal of him rests there forever. His charities exceed his means of gratification. He was ever ready to assist with his knowledge and his services all who desired his advice and assistance in the department in which he was so familiar, and this too, without other reward than that of helping a fellow-being. His sensibilities were of that true and genuine character that no familiarity with affliction rendered callous to the voice of woe. How many will bear in mind the gentle and affectionate care with which he performed whatever belonged to his position. When the stranger was interred there was at least one mourner at his grave.

Mr. Ross was so retiring and unassuming in his deportment that he was not calculated to push his acquaintance and make friends in the world. His worth was known to comparatively few. He was intelligent, active and energetic, but only in the vocation he had selected. He was thoughtful, studious and penetrating, but only in the arts which pertained to his business. His mind was embellished as the grounds he has rendered so lovely; but his knowledge and his accomplishments were in harmony with his character. No purer or gentler spirit has laid down its burden of earthly care, to seek a resting place beneath and beyond the tomb. Therefore

Resolved, That in the death of David Ross this Board has met with an irreparable loss.

Resolved, That in the deceased the public has been bereft of a practical philanthropist, whose knowledge was elevating the taste of the country, and whose generous and active assistance was diffusing a love for the arts which beautify and adorn the earth.

Resolved, That this Board deeply sympathize with the family of Mr. Ross in their affliction, and especially with his widow, to whose tender assiduity the deceased was indebted for support and succor when wasted by care and labor and to whose beautiful accomplishments the Cemetery is indebted for some of its sweetest memorials.

Resolved, That a committee of members of this Board and of the lot-holders in the Cemetery, be appointed to collect subscriptions for the erection of a substantial monument to the memory of the deceased, and that said committee have the superintendence and charge of the work.

Whereupon, the following gentlemen were appointed said committee.

On part of the Trustees,	On part of Lot-holders.
Abram Hite,	Isaac Everett,
Dr. T. E. Wilson,	W. B. Belknap,
Bland Ballard,	E. H. Summers.

### Tuft's Patent Portable Fence.

We have received numerous enquiries by letter from our subscribers as to the price of county and farm rights for the use of Tuft's patent portable fence.

The price for county rights depends upon the size and population of the county—a large county, well adapted to farming purposes and thick-

ly settled, the sum of \$150 or \$200 would be asked for the right to sell said fence throughout the county. While for a smaller county, less thickly populated, \$100, or even less, would be asked for the same right in the county. For farm rights the sum of ten cents per acre on the improved land one has in possession would be asked.

### ILLINOIS STATE FAIR.

The State Fair of Illinois was held at Alton, commencing on the 30th of September. Upwards of \$9,000 were taken in at the gates during the exhibition. This sum was supposed to be sufficient to pay all the expenses of the Fair. According to the most reliable estimates it was supposed that there were from 16,000 to 20,000 people upon the grounds on Thursday—this being by far the largest attendance.

The exhibition of stock, agricultural implements, dairy products, &c., &c., was fine. Illinois is truly entitled to feel proud of her agricultural exhibitions.

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### ST. LOUIS MARKET.

ST. LOUIS, October 28, 1856.

Grain and Flour.—Wheat, red \$1@1.20; spring \$1; choice white \$1.25. Corn 45@47c. Oats 45@50c. Rye 70c. Barley \$1.50.  
Good white beans \$2.10 per bushel.  
Seeds.—Flax \$2.30 per bushel. Timothy \$2.50. Clover \$7.50 per bushel.  
Hay 70 cents per 100 pounds.  
Potatoes 70c to \$1 per bushel.  
Hemp—new \$1.52; choice old \$1.75.

### LOUISVILLE MARKET.

LOUISVILLE, October 25, 1856.

Grain and Flour.—Wheat, red \$1.15@1.20. Corn 55 @60c. Rye 65@70c. Barley \$1.40. Oats 43c.  
Hemp \$1.60@1.75; dressed \$2.35.  
Seeds.—Flax \$1.75; blue grass, stripped \$75c; cleaned \$1.25@1.50; hemp \$1; orchard grass \$1.50@1.75; timothy \$3.75@4; herds grass \$1.50.



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3. Browne's Am. Bird Fancier; paper 25 cts., cloth 50
4. Dadd's Am. Cattle Doctor, cloth 1 00
5. Dana's Muck Manual, cloth, 1 00
6. Dana's Prize Essay on Manures, 25
7. Stockhardt's Chemical Field Lectures, 1 00
8. Blake's Farmer at Home, 1 25
9. Buist's Am. Flower Garden Directory 1 25
10. Buist's Family Kitchen Gardener, 75
11. Norton's Scientific and Pract. Agricult. 60
12. Johnston's Catechism of Agricultural Chemistry (for Schools) 25
13. Johnston's Elements of Agricultural Chemistry and Geology 1 00
14. Johnston's Lectures on Agricultural Chemistry and Geology 1 25
15. Downing's Landscape Gardening 3 50
16. Fessenden's Complete Farmer and Gardener 1 25
17. Fessenden's Am. Kitchen Gardener cloth 50
18. Nash's Progressive Farmer 60
19. Richardson's Domestic Fowls 25
20. Richardson on the Horse—Varieties, Breeding, &c., 25
21. Richardson on the diseases and Management of the Hog 25
22. Richardson on the Destruction of the Pests of the Farm 25
23. Richardson on the Hive and Honey Bee, 25
24. Milburn and Stevens on the Cow and Dairy Husbandry, 25
25. Skinner's Elements of Agriculture, 25
26. Topham's Chemistry Made Easy, for the use of Farmers, 25
27. Allen's Treatise on the Culture of the Grape, 1 00
28. Allen on the Diseases of Domestic Animals, 75
29. Allen's American Farm Book, 1 00
30. Allen's Rural Architecture, 1 25
31. Pardee on the Cultivation of the Strawberry, &c, 60
32. Podder's Farmers' Land Measurer, 50
33. Phelps' Bee-Keeper's Chart, 25
34. Guenon's Treatise on Milch Cows; paper 38 cts. cloth 63
35. Gunn's Domestic Medicine—a book for every married man and woman 3 00
36. Randall's Sheep Husbandry, 1 25
37. Youatt, Randall, and Skinner's Shepherd's own Book, 2 00
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50. Quinby's Mysteries of Bee Keeping, 1 00
51. Cottage and Farm Bee-Keeper, 50
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54. Every Lady her own Flower Gardener; paper 25 cts., cloth 50
55. The Am. Rose Culturist; paper 25 cts., cloth 50
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57. Chorlton's Cold Grapery, from direct American Practice, 50

58. Saxton's Rural Hand Books, 3 vols., 3 75
59. Bement's Rabbit Fancier; paper 25 cts., cloth 50
60. Roemelin's Vine-Dresser's Manual, 50
61. Neil's Fruit, Flower, and Vegetable Gardener's Companion, 1 00
62. Browne's American Poultry Yard, 1 00
63. Browne's Field Book of Manures, 1 25
64. Hooper's Dog and Gun, 50
65. Skillful Housewife, paper, 25
66. Chorlton's Grape Grower's Guide; paper 50 cts., cloth 60
67. White's Gardening for the South, 1 25
68. Eastwood's Manual for Cultivating the Cranberry, 50
69. Johnson's Dictionary of modern Gardening, 1 50
70. Perroz on the Culture of the Vine, 50
71. American Agriculturist, 10 vols., 12 50
72. Boussingault's Rural Economy, 1 25
73. Thompson's Food of Animals; paper 50 cts., cloth 75
74. Richardson on Dogs—their Origin, Varieties, &c.; paper 25 cts., cloth 50
75. Liebig's Familiar Letters to Farmers on Chemistry; paper 25 cts., cloth 50

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Persons wishing to purchase would do well to call early, as I will not be able to supply the fall demand. I shall be pleased to see any gentlemen at my residence five miles south of Paris, and one mile from Cooper's Station on the Lexington and Covington Railroad, Bourbon Co., who has a taste for fine stock. I have also some fine pure bred Short Horn Cows, Heifers, and young Bulls which I would sell.

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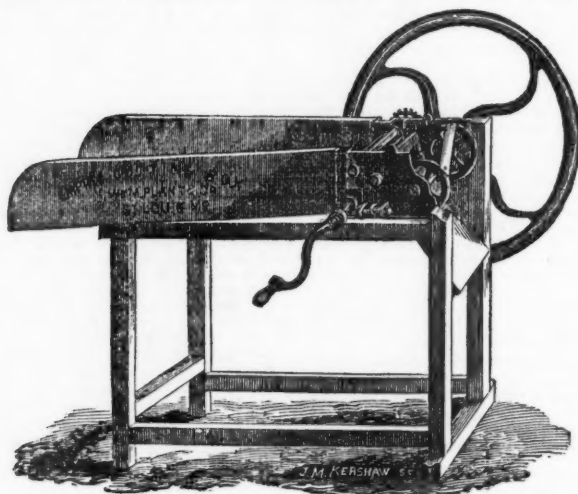
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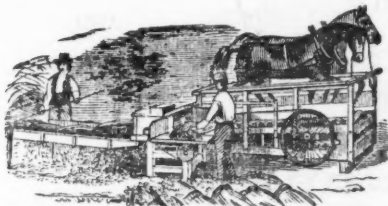
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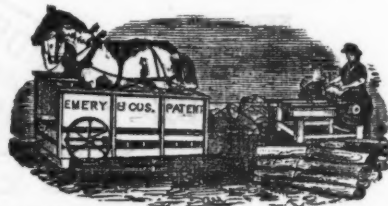
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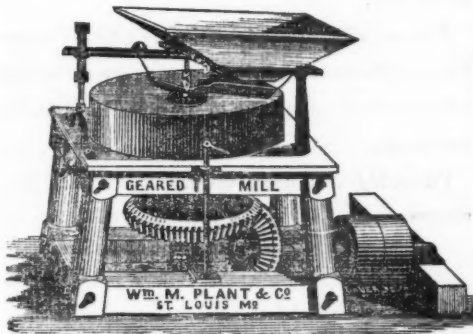
### Changeale Railroad Horse Power WITH THRESHER AND SEPARATOR

We have been selling the above justly celebrated Machines, over five years, and can safely say they are the *best* Railroad Horse Power now before the public. Without exception they have given universal satisfaction, not one having been returned, notwithstanding the warranty is broad and liberal. This Power is admirably adapted for driving THRESHERS, CIRCULAR and CROSS-CUT SAWS, PUMPS, FERRY BOATS, PILE DRIVERS, GRIST and CIDER MILLS, CORN SHELLERS, HAY and STRAW CUTTERS, &c. They will admit of *four* variations of speed, without any *change* in elevation of Power, and the speed of the horses is *always* the same. This is one of its *principal* features, which *no other* power possesses. The Two Horse Power, Thresher and Separator, is capable, with four men, of threshing from 150 to 225 bushels of Wheat or Rye, and double that quantity of Oats per day. Price, complete, \$200 00.

A large supply on hand and for sale by

WM. M. PLANT & CO.

### BURROW'S PATENT GRIST MILL.



THESE Mills are composed of the best quality of French Burr Blocks, enclosed in a Cast Iron Case to give strength and weight to the Stone which is indispensable in small Mills, where the stone is run with great speed, and becomes dangerous if not strongly made.

They can be run with Steam, Horse, or Water Power and do not require a millwright to set them up, as they are already trimmed to run.

By the steady application of Three Horses on a good Lever Power, the 24 inch geared Mill (\$150) run 240 revolutions per minute—will grind from 5 to 8 bushels of good meal per hour, and will grind Wheat as well as Corn. The 30 inch Mill, if put to its fullest speed, will grind from 10 to 15 bushels per hour.

We have been agents for these superior Mills since 1852, and all have been sold on a warrant to perform as above, and not one has failed to give the very best of satisfaction.

We offer them to the public with a full guarantee that they are superior both in point of work and workmanship, to any other Portable Grist Mill now in use.

Descriptive circular furnished gratis to applicants.

#### PRICES.

20 inch Stone with Pully	\$115 00,	with Gear	\$125 00
24 " " "	135 00,	" "	150 00
30 " " "	175 00,	" "	200 00
36 " " "	225 00,	" "	250 00

The 30 inch, with Gear, is admirably adapted to use with Saw Mills. Bolting Cloth and Belt furnished with Mills when desired, by

ST. LOUIS AGRICULTURAL WAREHOUSE AND SEED STORE.

No. 14 Main street, St. Louis, Mo., Sign of the Gilt Plow.

NEW  
AGRICULTURAL  
WAREHOUSE



AND  
SEED  
STORE

**DAVID LANDREEH,**  
WHOLESALE AND RETAIL DEALER IN  
**GARDEN, GRASS AND OTHER SEEDS,**  
MACHINES, AGRICULTURAL IMPLEMENTS AND TOOLS,  
**No. 18 South Main street,**  
BETWEEN MARKET AND WALNUT,  
SAINT LOUIS, MO.

## HICKOCK'S PATENT PORTABLE CIDER MILL.

This Mill is warranted to give satisfaction and to perform as represented. The undersigned will be well supplied during the season, and respectfully solicits orders for the same.  
Price \$45 00.

D. LANDRETH.

No. 18 South Main Street.



Manufactured at Landreth's Agricultural Works, Bristol, Pa., and for sale in St. Louis, at his Warehouse, only.

Farmers will take notice, this Sheller has Concave Feeding Wheels and Bevelled Cogs, to prevent choking, and are warranted superior to any other Hand Sheller now in use.

Price \$28.00. A liberal discount to Wholesale Purchasers.

D. LANDRETH.

No. 18 South Main Street.

## CONSTANTLY ON HAND AT LANDRETH'S AGRICULTURAL HOUSE.

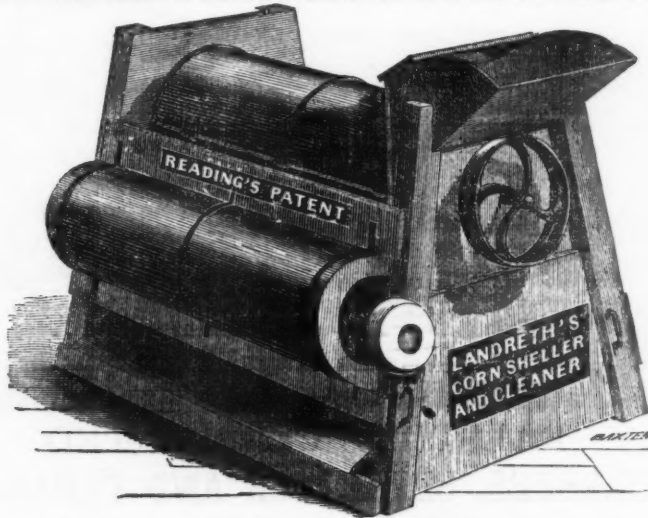
NO. 18 SOUTH MAIN STREET,

PLOWS, in great variety.  
CULTIVATORS AND HOE HARROWS,  
STRAW AND CHAFF CUTTERS,  
CORN AND COB CRUSHERS.  
FARMERS' BOILERS.  
FANNING MILLS.  
HORSE POWERS.  
REVOLVING HAY RAKES.

### MOWERS AND REAPERS.

MCCORMICK'S  
HUSSEY'S,  
ATKINS' Self-Raker,  
BROWN'S,  
SMITH'S, and other well known Machines.

## LANDRETH'S CORN SHELLER AND CLEANER



READINGS'

This machine is truly extraordinary in its power and capacity, and will unquestionably work an important change in the cost of preparing corn for market; and it is by no means too much to say, will save the farmers of the great corn producing States Tens of Thousands of Dollars yearly. With a new one horse tread power, One Hundred and Forty bushels of Ears have been shelled within an hour, not as an experiment, but as ordinary labor. For sale only at

Price with Fan.....\$75 00  
 " without Fan.....\$60 00

LANDRETH'S AGRICULTURAL HOUSE,  
 No. 18 South Main street, St. Louis, Mo.

[Ja. '56]

## IMPORTANT TO FARMERS!!



**IMPROVED LITTLE GIANT**  
 Corn and Cob Plantation Mill,  
 PATENTED MAY 16th, 1854.

**Improved in 1856, with Tripplle Crushers and Double Grinding Surfaces.**

Persons in want of a Mill for preparing feed for Stock, are invited to take one of these Mills and try it, in comparison with any other kind of Mill for the same purpose. If they are not found to do twenty-five per cent more work, and do it equally as well, if not better, with the same, or less power, no charge will be made for the Mill.

THE IMPROVED LITTLE GIANT, No. 4, will grind from thirty to forty bushels per hour, with three horses.—Price \$60.

No. 3, twenty to thirty bushels. Price \$50.

No. 2, ten to twenty bushels. Price \$40.

Either of these mills may be changed to single grinders in a moment, requiring only half the power.

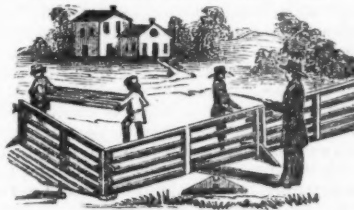
We have a No. 1 Mill, the old pattern, which is an excellent grinder. Price \$30. Grinds from four to eight bushels per hour with one horse.

The variation in quantity will be owing to the quality and condition of the corn, and the degree of fineness of grinding.

In regard to durability, we say, that No. 4 will last to grind 40,000 bushels, at least, before it fails to do its work well. Other sizes will be found equally durable in proportion to their size.

JAMES B. CHADWICK,  
 Jan. '56.  
 No. 63 Locust street, between 2d & 3d, St. Louis, Mo.

## VALUABLE TO FARMERS.

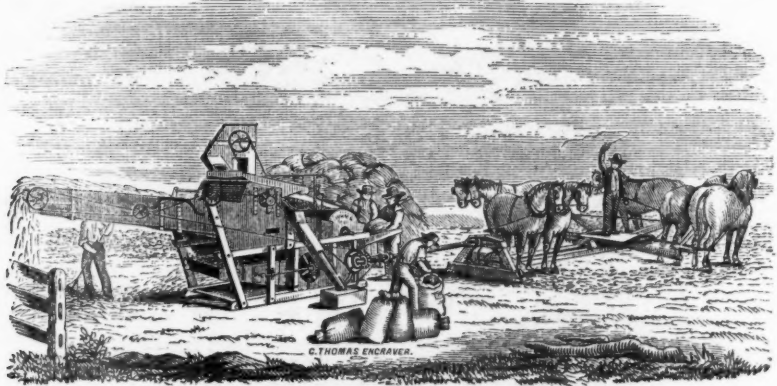


**A Superior Board Fence without Posts!!**  
**S. G. TUFT'S PORTABLE SELF-SUPPORTED FENCE.**

This fence is a new and valuable invention, patented April 1st, 1856. The following are a few of its advantages over any fence yet invented: 1st. It is constructed entirely without posts, which is an important advantage where timber is scarce. 2d. Each pannel being made separately, it is put up, taken apart, and moved with little trouble. 3d. It requires twenty feet less lumber to the rod than a common board fence. 4th. It can be made by the farmer at his leisure, in his shop or shed, during stormy weather. 5th. Its construction is so simple that any farmer can make it—the only tools used being a saw, hatchet, chisel and auger. 6th. It is so connected together that it cannot be blown over unless it all goes at once, of which there is little or no danger. 7th. It can be made of boards of any length and width, and can be built on any kind of ground, level or hilly. 8th. Any pannel can be taken out and replaced without injury to the fence, nearly as quickly as bars can be taken down and put up; thus obviating the necessity of taking down a whole fence in order to repair it. These advantages, together with its portability and strength when set up, renders it the cheapest and most efficient fence now in use.

J. M. Tooker, agent for Missouri. County and Farm Rights for sale at the Valley Farmer office, St. Louis.

SOUTH-WESTERN AGRICULTURAL WORKS, LOUISVILLE, KENTUCKY.



## RALSTON'S CELEBRATED THRESHER, SEPARATOR AND CLEANER.

The above engraving accurately represents these unrivalled machines, and we are now engaged in manufacturing them in the city of Louisville, Ky.

We claim for Ralston's Cleaner, the following advantages over all other machines of a similar character:

1st. It does up all the work by one operation, in the most desirable manner, thoroughly threshing out the wheat, whipping and shaking all the straw as it passes over the carrier, so as to shake out any loose grains carried in the straw.

2nd. It has two fans and two sets of riddles. The first blows out all the dirt and chaff, and separates the chaff, cockle, gravel, sand and small grass and weed seeds. The second separates the wheat with an additional shake and blast, and delivers it well cleaned on either side of the machine, at a sufficient height from the ground to attach a grain bag, while the white caps are passed back to the feed board, to enter the thresher with fresh sheaves.

3d. The riddles are patented, and constructed of sheet iron, punched in such a manner as to allow the wheat and heavy substances to pass through, while the chaff, straw and threshed heads roll off without any possibility of choking them. Riddles constructed on any other plan will choke.

4th. The rope driving-belts, as well as the carrier-belts, are made of the best belting leather, which can be tightened or loosened in a moment by twisting or untwisting. These belts are more durable and less liable to get out of order than any other kind, while carriers formed of cast iron links are constantly liable to break and get out of order.

5th. Its durability and strength—being constructed of thoroughly seasoned wood, and the best quality of wrought and cast iron.

6th. Its ease of draft, and the amount of good work—greater than any other machine can be made to perform with the same power and number of hands.

7th. The ease with which it can be transported on common country wagons—three or four hands can load or unload in fifteen or twenty minutes. Directions for loading and unloading accompanying each machine.

8th. Our straw carriers are made of seasoned split hickory of the toughest quality, instead of turned ash, as many others, which are much more liable to break.

9th. The power is attached to the thresher by means of a tumbling shaft instead of a band, and this will be found a great advantage in all machines intended for threshing.

### WARRANTEE.

In offering these machines to the public, we warrant every machine to be well made and to do good work to the satisfaction of the purchaser, or we will refund the money on return of the machine.

We make at present but one size of these Cleaners.

No. 1 Thresher, Separator and Cleaner, with power for eight horses, complete, \$310, delivered on steamboat or cars.

A liberal discount made to dealers. Orders from abroad promptly attended to.

**MUNN & CO.,**

no.tf.

SOUTH-WESTERN AGRICULTURAL WORKS, Louisville, Ky.





## SANDFORD CUTTING BOX.

We are now manufacturing at our Agricultural Works the celebrated and popular Straw Cutter, known as Sandford's. We make two sizes—

No. 1 Straw Cutter	- - -	\$16 00
No. 2 " "	- - -	12 00

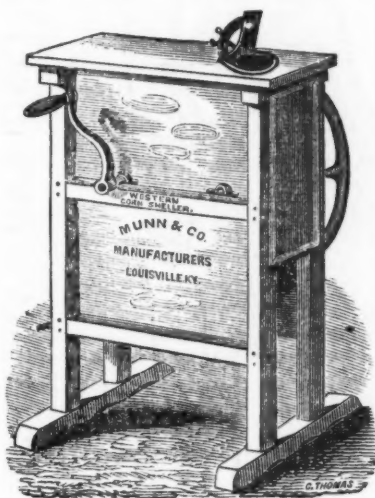
From these prices we make a liberal discount to dealers, and our facilities for manufacturing are such that we can fill orders to any amount at short notice.

We are also manufacturing Circular Saw Mills, adapted to Horse or Steam Power. Either we furnish, and which, for simplicity and durability, cannot be surpassed.

**MUNN & CO.,**

CORNER OF EIGHTH AND GREEN STREETS, LOUISVILLE, KY.

## WESTERN CORN SHELLERS:



We are now manufacturing the Corn Sheller, known as the WESTERN or BOX SHELLER. The cut is an accurate representation of it. We make them of the best seasoned wood, and with wrought iron arbors or shafts, instead of cast iron as they are made in the East.

The Shell wheels are also heavier and made of the strongest iron.

We call attention to another improvement which we have introduced in this Sheller. The Cogs, both of the large wheel and pinion, are open, so that no Corn or Cob can mash in them, and cause breakage, as has often been the case with Shellers made elsewhere.

We make but one size, as we do not think this kind of Sheller best for other than hand power.

The capacity of this Sheller is about 300 bushels per day.

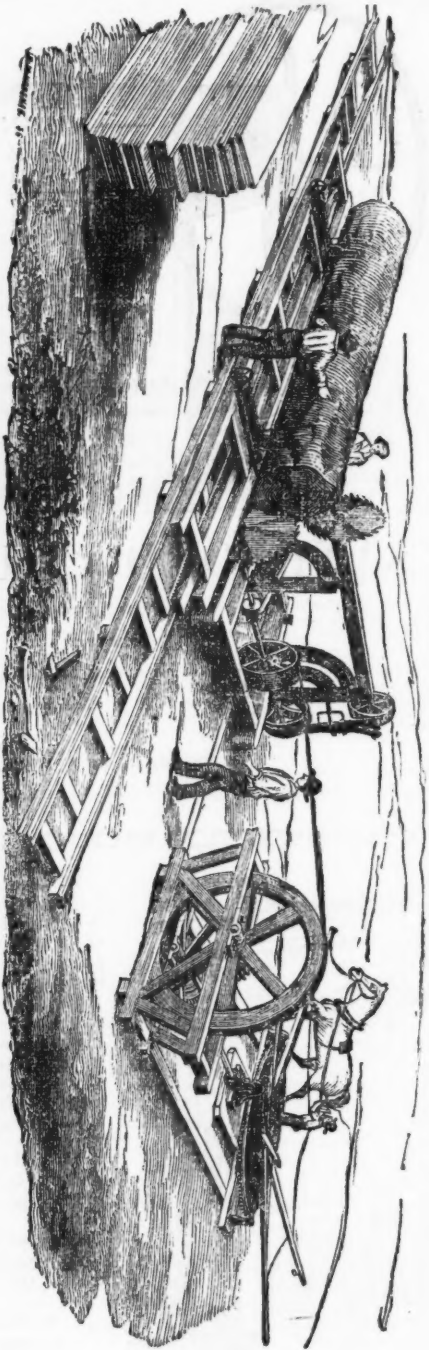
Our Retail Price is - - - - - \$12.

From which we make a liberal discount to the trade. Orders promptly attended to.

**MUNN & CO.,**

SOUTH-WESTERN AGRICULTURAL WORKS,  
Corner of Eighth and Green streets,  
LOUISVILLE, KENTUCKY.

WHITNEY'S PATENT PORTABLE DOUBLE CIRCULAR SAW MILL.  
PATENTED MARCH 4, 1856.



MANUFACTURED BY CLARK & AVERY,  
AT THE  
PEOPLE'S IRON WORKS,

Main street, between Florida and Mulamphy streets, North of the Shot Tower, St. Louis, Mo.

The Simplicity, Cheapness, Durability, Strength and Easy Management of this Mill, makes it the best now in use. A glance at its combined improvements cannot fail to convince every person of the superiority over any other for making lumber. It is constructed with two Saws, one above the other, and in line with each other, so as to assist in cutting off the slab, swell, butts and knots, and splitting large logs. The top saw can be moved on the arcs, so as to cut two planks with one run of the carriage, and in cutting fencing it will cut from two to eight boards with the two saws. The after end of the two saw shafts are connected by an arm, which acts as a guide for both shafts, and serves for their adjustment, so as to have complete control of the saws whilst running, and keeping them true with each other whilst cutting. It is capable of sawing 1000 feet per hour, and will work without sawing crooked, in all kinds of timber. We warrant the Mills to perform in every respect as represented.

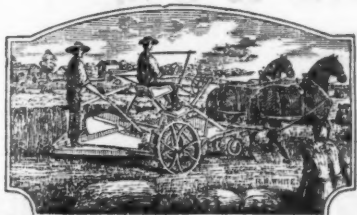
One of these Mills can be seen in operation at the PEOPLE'S IRON WORKS, where the public are invited to examine for themselves, and any information respecting them will be cheerfully given on application to our Agents, Wm. M. PLANT & CO., No. 14 North Main street, or to ISAAC L. GARRISON, President of the Home Mutual Insurance Company, corner of Main and Vine streets.

Horse Powers and Steam Engines furnished with the Mills at short notice and upon satisfactory terms.

St. Louis, SEPTEMBER, 1856.

CLARK & AVERY.

## MOWING & REAPING MACHINES COMBINED,



### Manny's Patent.

The subscriber is now manufacturing extensively this Machine in Louisville, for the coming harvest.

It is generally admitted that this is the best and ONLY successful Combined Mowing and Reaping Machine now before the public of either Continent. The universal satisfaction it has given throughout this country and France during the last harvest, is perhaps unparalleled.

Of the One Hundred Machines manufactured and sold by me last season, not one has been returned; and the purchasers generally have informed me that they performed better than was recommended, as may be seen by numerous letters now in my possession, some of which are published below.

The Machines are well built, and of the best material. They run entirely on wheels, rendering it the lightest draft of any of the machines now before the public, and can be run from field to field as easily as a cart. It can be changed for either purpose of Mowing or Reaping in less than five minutes. In cutting grain, the driver, while on his seat, can regulate it so as to cut the stubble from Three to Eighteen inches high, according to the condition of the grain, whether standing or fallen.

The Two Horse Machines are warranted to cut from **Eight to Fifteen** acres of grass or grain in a day, requiring only a driver in mowing, and a driver and raker in reaping.

Since the last harvest several very **Important and Valuable Improvements** have been made and patented, rendering it more complete and perfect than any harvester now manufactured.

I shall be prepared to fill any orders by the first of January 1856. Persons intending to order Machines, will do well to send in their orders early, that they may be shipped while the rivers are in good stage. Descriptive Catalogues will be sent to those who order them.

I have also for sale a very large variety of other Agricultural Implements, among which may be found

**Horse Powers and Threshers, Straw Cutters, Corn Shellers and Plows** of various sizes and patterns. Also a variety of

**Grass Seeds, &c.**

WAREHOUSE on SIXTH STREET,

between Main and Market streets,

LOUISVILLE, KY.

H. B. HOWARD.

CERTIFICATES.

EMINENCE, KY., October 8th, 1855.

Mr. H. B. HOWARD, Dear Sir:—Having bought one of Manny's Combined Reaping and Mowing Machines, manufactured by you, and the season being now over, I shall, agreeable to promise, inform you how I succeeded with it.

The Wheat and Rye in this vicinity was more or less blown down. I cut grain and mowed grass for ten or twelve different farmers. I went into field of grain that I did not reap with it, nor mow that I did not mow, whether standing or fallen, and cut 300 acres with it, and it is not materially worn. I like the machine because it is adjustable to standing or fallen grain, as well to long or short straw, and because it is manageable with two horses, and what it lacks in width of swath is chiefly gained in the gait of the horses, and in turning at the corners; and more especially, because in cutting grain that is rather green or wet with the dews and tangled, if the machine cut a wider swath than five feet, with the cutter-bar lowered sufficiently to save it, it would be an

overmatch for the raker. I can therefore heartily recommend the machine as having succeeded to my satisfaction and that of my neighbors, as a labor-saving machine, far beyond what was contemplated.

Respectfully,

S. T. DRANE.

VOLNEY, Ky. Nov. 19th, 1855.

Mr. H. B. HOWARD, Dear Sir:—I am very much pleased with the Reaper and Mower you sent me last spring. It performed far beyond my expectations; and as a Combined Machine I have no doubt it is the best that is used in this country. You will have a good many applications from this part of the country, as all seem to prefer it as a Combined Machine, to any other.

Respectfully,

RICHARD BROWDER.

FLORENCE, ALA., June 20th, 1855.

Mr. H. B. HOWARD, Louisville, Ky., Dear Sir:—I have finished cutting my wheat, and am pleased to say that the Reaper performed well; in fact, it has gone beyond my expectations, executing the work much better than the scythe. Some ten or twelve gentlemen witnessed the operation, and I believe every one decided for the Reaper.

Respectfully yours,

W. H. KEY.

SIGERSON'S

SEED  STORE

AND

AGRICULTURAL WAREHOUSE,

Corner of Broadway and Wash Streets, St. Louis.

THE undersigned beg leave to acquaint their numerous customers in the West, that they will have for sale this spring, the largest and best selected stock of

**Field, Garden and Flower Seeds,**

ever offered for sale in this market; and to which will be added a large and complete stock of

**AGRICULTURAL IMPLEMENTS,**

Embracing every conceivable variety likely to be wanted by Farmers and Gardeners. They pledge themselves that their stock for the Spring has been selected from the most reliable manufacturers in the East, and with unusual care.

They flatter themselves that their experience in Agriculture and Horticulture, has enabled them to make such selections as will give the most entire satisfaction to their customers.

JOHN SIGERSON & BRO.

**Agricultural and Horticultural Books.**

THE undersigned take pleasure in stating to their former patrons and the public generally, that they have now on the way from the East, by Express, the most full, complete, and best selected stock of Agricultural Books ever offered in the West. A Descriptive Catalogue of Agricultural Implements, Field, Garden, Flower seeds, Agricultural and Horticultural Books, &c., will be forthcoming in a few days, and will be furnished to all post paid applicants free of charge.

JOHN SIGERSON & BRO.

Corner of Broadway and Wash sts.,

St. Louis, Mo.

ap.



### HEDGING:

Having ordered 300 bushels of Osage Orange Seed fresh from Texas, we will furnish all orders in all the prairie south of Missouri river, with Kansas, Nebraska and Iowa near the river, to the 42d degree of latitude.

Printed directions for preparing ground, seeds, planting training, &c. Seeds procured under the direction of one of the company and warranted.

We design establishing an agency in each county Seat. Also to establish a nursery in each county in the part of Missouri above named and Kansas, that plants may be obtained fresh, without loss of vitality. All Nurserymen within the above bounds may depend upon good seed delivered at their county seats or dwellings, by addressing the undersigned at Rural, Jasper county, Mo.

Jan '56.

JOHN D. TAMPSON & CO.

# M. G. MOIES & CO.,

NO. 18

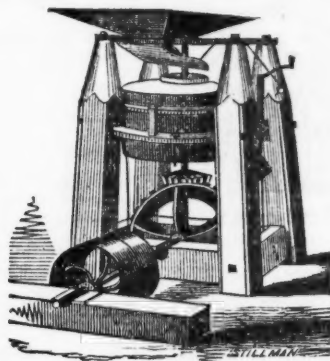
ARE

Main street,

Sole Agents

ST. LOUIS, MO.

FOR THE SALE OF



## STRAUB'S CELEBRATED CORN AND WHEAT MILL QUEEN OF THE SOUTH.

PATENTED JUNE 27, 1854.

This remarkable Mill has been kept secured to the inventor by caveat—recently, however (27th June, 1854)—Letters Patent for the United States have been granted, securing the invention for 14 years. This Mill has sustained itself wherever it has been brought into competition with other Mills. It was run against the other make of Mills of our city at the Ohio State Fair, in 1850, when it drew a Diploma as the best Corn Mill and was awarded a fine silver medal.

Of these mills we manufacture five sizes for corn, and three expressly for grinding wheat flour.

The peculiar novelty of this mill is, the under stone is the running stone, in all cases. There is no limit to the speed, and as speed is everything in grinding, it will out-grind any upper runner in the world.

Secondly: By this arrangement, we are enabled to get grain into the Mill with a very small eye; consequently we grind nearer to the centre, and of course with less power than any upper runner can be made.

Thirdly: Our mill takes any kind of grain without choking. We warrant against choking in all cases. This is a great vexation, causing delay and trouble in all Mills where the upper stone is the runner. Of course, we mean small mills, where the motion must be high to do much business.

Fourthly: Our Mills never take injury by running empty—the under stone not touching the upper one, no injury can be done. This is an important advantage over all Mills whose upper stone is the runner. Ten minutes running without feed—where a heavy runner is balanced on a ryne—will do the Mill more injury than six months proper using.

Fifthly: In all Mills where the upper stone is the runner, there is often much trouble to keep the bush properly oiled; if neglected, the Mill must take injury. Our mills are free of this, because we have no bush in the Mill. We have a bearing entirely above all the stones, in sight, and can be oiled at any time when grinding.

We manufacture our Mill stones of the best French Burr Blocks the market affords, all of which we warrant superior.

## Queen of the South, with Corn Crusher Attached. "COMBINATION MILLS."

PATENTED JULY, 1854.

This Crusher was on exhibition at the Fair of the Mechanics' Institute, last fall, where it was run by steam. It was awarded the first Premium and Diploma. The committee appended the following complimentary remarks:—"We regard Mr. Straub's Corn Crusher the most useful, as well as important invention of the day. Every farmer ought to have one."

The Cob Breaker is placed immediately over a pair of French burrs, the burrs performing the pulverizing; and when they get dull, in a short time can be sharpened, and thus the cutting edges can be restored. Not so with a metal crusher: when the cutting edges get dull, which they soon will do, the crusher may as well be thrown away. In our judgment, no metal crusher ever did, or ever will, make good, soft, fine, cob food. To make this valuable article for stock, it must be ground through mill stones; for, be it remembered, some parts of a cob are as hard as a hickory knot, and, if not softened under a mill stone, is indigestible; and the stock will have frequent attacks of the scours, and be much injured.

Cob feed is an excellent article for sheep, milch cows, mules, cattle and horses.—the cob acting as a cooling alloy. In this view of the case it is even better than hay, because it will be better mixed with the corn than hay, and the heating in the stomach prevented.

The Cob Breaker can be taken off, and hopper put on the mill, and corn meal for the family can be ground, as well as chopping rye, or any small grain for horse feed, etc.

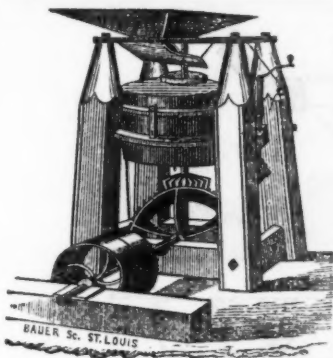
We place this Cob Breaker on any sized mills, from 14 to 20 inches in diameter.

By steam power, fifteen bushels per hour can be easily made fine from the whole ear of corn; and about three bushels per hour for every horse put in.

For Descriptive Pamphlet apply to the Agents.

jan.'56.





## G. & C. TODD & CO., MILL FURNISHERS,

NO. 112 NORTH MAIN STREET

Corner of Morgan street,

SAINT LOUIS, MO.



### TODD'S IRON BACK MILLS.

The construction of this Mill is simple and very durable. There is no complication in any part of it. The Stones are adjusted and operated in the same manner as in ordinary flour mills. The Mill can be entrusted with safety to the charge of any careful hand, and cannot fail to give entire satisfaction.

### Todd's Improved Pressure and Self-regulating Mills.

These Mills are in extensive use, and are highly commended. Their construction is the same as the Iron Back Mills, differing only in the substitution of Pressure for weight of Runner. The weight of the Runner is sufficient for ordinary grinding, say from six to eight bushels per hour. When desired to do more, the Pressure applies to the extent required for the increased feed. It graduates and applies itself.

### TODD'S CHALLENGE.

The under Stone of this Mill revolves.

For more than fifteen years we have been engaged in manufacturing these Mills, closely observing their performance, with a view to making such improvements as our experience might suggest. And now, we believe our Mill is the best of the kind in use. They are made with greater arrangement is made with a view to strength and durability.

The principal objection to mills with the under stone for TRAM. Second, the stones being confined between unyielding risk of breaking, harder substances than grain; for instance between the stones. The first, we have overcome by a simple points in the bed plate, and corresponding screws in the upper. The screws are convenient of access, and the stones can be brought so arranged as to receive the entire resistance of the stones in their grinding operation, and to yield for the discharge of hard substances with facility, and without risk to the mill. These springs are durable and do not add to the complication of the machinery.

er, is, First, the difficulty of keeping the stones in place, rendering it difficult to discharge, without the, &c., that might, and which often do, fall because of adjusting screws at four equi-distant of the frame in which the upper stone is secured. to a true level or Tram with ease and accuracy. of Elastic Springs at four equi-distant points, grinding operation, and to yield for the discharge of hard substances with facility, and without risk to the mill. These springs are durable and do not add to the complication of the machinery.

### BELTING.

For four years we have been manufacturing this article. One of the firm is an experienced and skilful workman, who gives his personal attention and labor to this department; every foot of belting passes through his hands, and if not suitable is condemned. Our machinery is of the most approved kind, and our leather is tanned in whole hides, selected expressly with reference to its fitness for belting.

### Rubber Belting Hose and Steam Packing.

We are the only agents of the Boston Belting Company in this city, for the sale of these goods.

### FRENCH BURR MILL STONES.

To this department of our business we have been to great expense in obtaining the best material produced by the quarries in France. Our stock is selected at the quarries, by one of the firm, who spends a portion of his time there. In selecting for our Portable Grain Mills the best article is obtained without regard to cost. Our stock is always large.

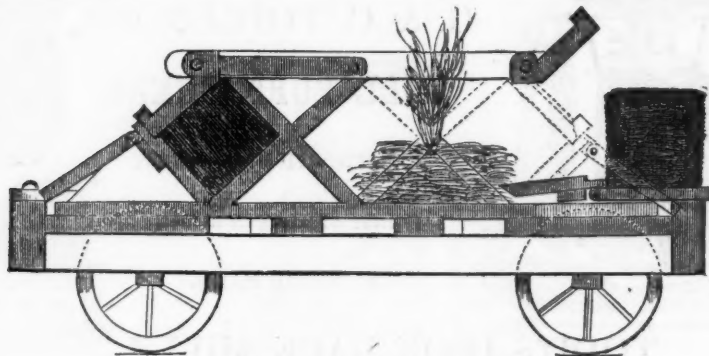
### BOLTING CLOTH.

This article, so difficult to obtain of superior quality, is made expressly for us. Our orders are in the hands of the manufacturers a year in advance, that they may have time to select the best material (Silk) and employ their most skilful workmen, that they may produce the quality we want. We refer to the mill owners in the country, and especially in this city, respecting this article.

### PRICES OF GRAIN MILLS.

2 foot Grain Mill with Pully	\$135,	Geared	\$160.
2½ " " "	"	170,	" 200.
3 " " "	"	225,	" 265.
3½ " " "	"	275,	" 330.

Screen Wire, Wrought Iron Spindles, Mill Picks, Hoisting Screws, Regulating Screws, Dam-sail Irons, Calcined Plaster of Paris, Copper Rivets, Lace Leather, &c., constantly on hand.



## MANNY'S PATENT PORTABLE HAY AND COTTON PRESS.

PATENTED APRIL 17, 1855.

Manufactured and for sale by **H. B. HOWARD**, at the Manny Reaper Warehouse, 6th st. near Main,  
LOUISVILLE, KENTUCKY.

Being a horizontal vibrating lever press, constructed on wheels; may be drawn from place to place, and is worked with great facility, the hay being put in at one end of the press, while the bale is being hooped at the other, and *vice versa*, pressing a bale at each vibration or movement of the follower; no time being lost in running back the follower; consequently, the hooping and filling may be continued without interruption, which makes it capable of doing a great amount of work. Those who purchase hay for shipping, will find it just the thing that will save them both time and money, and its convenience for pressing hay before it is stored in barns, must make it apparent to all that it is designed to fully meet the wants of the public. The following premiums have been awarded this press, viz: First Premium at the Stephenson County Fair, at Freeport; Ill. State Fair at Chicago, first premium; and at the Indiana State Fair at Indianapolis, first premium; and many other recommendations might be referred to, a few of which are inserted below:

LOUISVILLE, KY.

H. B. HOWARD.

### NOTICES OF THE PRESS, AND OPINIONS OF OTHERS.

#### ARTICLES ON EXHIBITION.

Among a number of articles on exhibition at the County Fair last week, we noticed a few that are specially worthy of commendation on account of their manifest adaptation to the wants which they propose to fill, and worthy the attention of our farmers. Among these we note MANNY'S PATENT HAY PRESS. This press was invented by Pells Manny, of Wadam's Grove in Stephenson county, and patented in April, 1855. It strikes us as a very valuable implement, and one that must come into very general use. It is a horizontal double-acting press, in which a bale of hay is pressed by each movement of the lever, while the action of the lever is such that the slow motion of the windlass is dispensed with. It is set upon wheels, and can easily be moved by a span of horses or yoke of oxen, while all the fastening necessary in locating it is simply blocking the wheels. The machinery of this press is really so simple, and so little liable to disarrangement, and at the same time so effective in its operation that we see no reason why it should not soon come into general use. The utility of the work which it is designed to do is apparent to all. Hay pressed is much more valuable than hay unpressed, both for feed and for convenience in storing, and in a country so finely adapted to grazing, pressing must become very general. We understand that Mr. Manny designs taking a model of his press to the State Fair, where it will no doubt receive as much attention as it did at our County Fair.—[Freeport Journal.

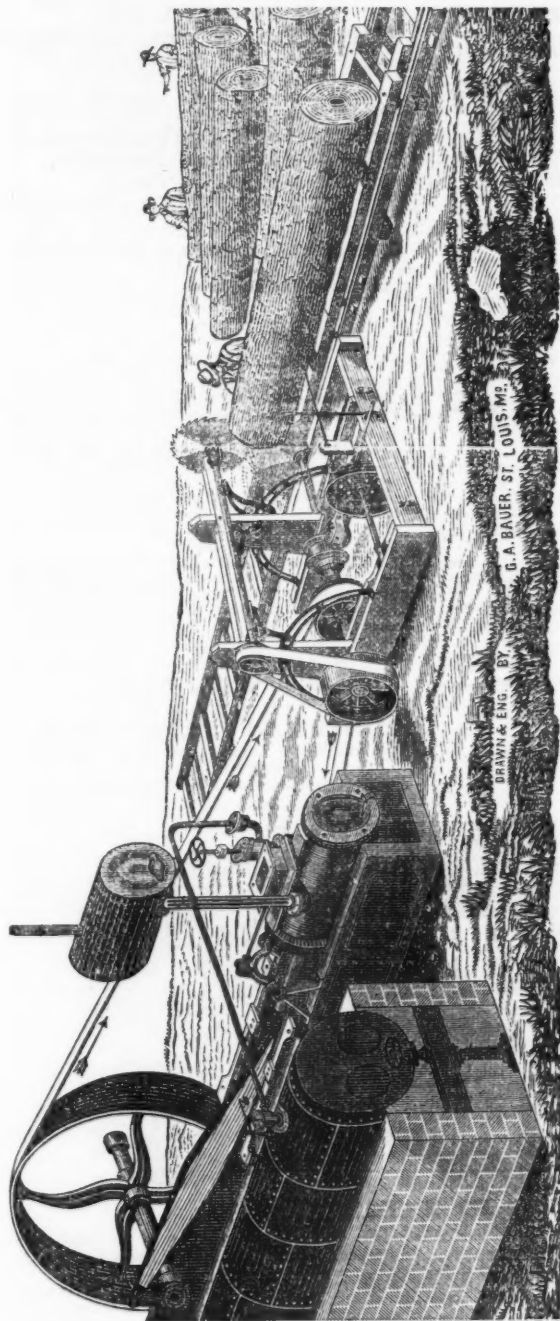
### NEW AND IMPORTANT INVENTION.

Mr. P. Manny, of Stephenson County, father of J. H. Manny, Esq., of this city, has invented and patented a kind of hay press entirely different from any now in use. The press was on exhibition at the State fair. The Chicago "Times" thus speaks of it:

It consists of a large box, of sufficient strength, mounted on wheels, so that it may be driven to any part of the field, and the hay pressed into bales, without being taken out of the meadow at all. Within the box is a moveable partition, worked by an outside lever, which presses the hay into bales at either end of the box. While one bale is being removed the other end is being filled, so that the machine works without interruption. It is calculated to press from twenty to fifty tons per day, and requires two or three men and a horse in the operation.

my.tf

[Rockford Republican.



THE ABOVE CUT REPRESENTS A

## PORTABLE CIRCULAR SAW MILL,

AS ATTACHED TO STEAM POWER.

These Mills, with steam power, are capable of sawing from three to six thousand feet of lumber per day, varying according to the power applied and kind of timber sawed. With the double Mill (as represented in cut) any kind of timber can be sawed. Having the exclusive right of manufacturing for a large portion of the territory of the West and South for *Page's Patent Single Saw Mill and Childs' Patent Double Saw Mill*, we can furnish either the single or double Mill for steam as preferred.

The "*Portable Circular Saw Mill*" is better adapted to the wants of the country than any other kind of mill now in use. They can be put in operation at a small expense; are durable and easily kept in order, and will saw more lumber in the same time than any other.

All orders addressed to us will be promptly executed and any information in regard to Mills cheerfully given.

PHENIX FOUNDRY, Corner of Second and Cherry Sts. St. Louis.  
KINGSLANDS & FERGUSON,

## MORGAN HORSES.

### A Premium Essay

ON THE  
ORIGIN, HISTORY AND CHARACTERISTICS  
OF THIS REMARKABLE  
**AMERICAN BREED OF HORSES.**  
TRACING THE PEDIGREE FROM THE ORIGINAL  
JUSTIN MORGAN, THROUGH THE MOST  
NOTED OF HIS PROGENY, DOWN  
TO THE PRESENT TIME.

**With Numerous Portraits.**  
TO WHICH ARE ADDED

*Hints for Breeding, Breaking, and general Use  
and Management of Horses,*

WITH PRACTICAL DIRECTIONS FOR TRAINING THEM FOR  
EXHIBITION AT AGRICULTURAL FAIRS.

**BY D. C. LINSLEY,**  
MIDDLEBERRY, Vt.

Price One Dollar. Sent free of postage.  
**C. M. SAXTON AND COMPANY,**  
Agricultural Book Publishers, 140 Fulton street, N. Y.

### TO FARMERS & MANUFACTURERS.

**THE U. S. FLAX AND HEMP COMPANY,**

No. 28 Pine street, New York,

Manufacture the Economical, and yet successful Flax  
and Hemp Machine, and are prepared to fill orders for  
the different sizes of Hand and Power Hemp Brakes and  
Scutches made by them, for Mill and Plantation use,  
and sold with the fullest guarantee as to durability and  
performance.

**SIXTY TIERCES** prime Flax Seed, selected for sow-  
ing, for sale. Orders must be addressed to **E. F. HOVEY,**  
at the Depot of the Company, 28 Pine street.

Refer to **EDW. S. GOULD,** 17 William street, N. Y.  
New York, July 1856. 6m.

### Apple Stocks and Seeds Wanted!

The subscribers wish to purchase, by the first of De-  
cember next the following articles:

Who will furnish them at the lowest price for Cash!  
25,000 strong, 2 years old Apple Seedlings.

100 bushels fresh, clean and dry Apple Seeds.

Address immediately, **C. B. SWASSEY & Co.**  
2. Nurserymen, Yazoo City, Mississippi.

### SOUTH-WESTERN SEED AND AGRICULTURAL WAREHOUSE.

**Pitkin Brothers,**

NO. 515, MAIN STREET,

LOUISVILLE, KY.

Among the various Improved Farming Implements  
and Machines kept constantly on hand and for sale, are  
**Four Horse Power Ohio Tumbling Shaft  
Treshing Machine. Price \$135.**

Two Horse Power Endless Chain or Railroad  
Threshing Machine and Separator..... \$150.00  
Wooster Pattern Wheat Fans, large size... \$ 20.00  
" " " " medium size " \$ 18.00

**STRAUB'S STOCK, CORN AND WHEAT MILLS,**  
according to size, from \$100 to \$200.

"**LITTLE GIANT**" Double, greatly Improved—

No. 1.....\$30.00  
" 2..... 40.00  
" 3..... 50.00  
" 4..... 60.00

With the late improvements in these mills, they may  
be changed in a moment from a double to a single mill,  
requiring but one half the power to grind. They may  
also be used to grind a fair article of corn meal for fam-  
ily use.

Also, **DAWSON'S HAND AND POWER CORN  
MILL,** by which one boy can grind two bushels of corn  
per hour with ease.

Price of Hand Mill, with one crank .....\$28

" " " " two cranks ..... 30

" " " " Power Mill..... 80

A variety of **STRAW CUTTERS**, from \$5 to \$55, including  
Sinclair's celebrated Propeller machines; together with  
all kinds of farmers', planters' and gardeners' tools.—  
Seeds of all kinds, &c., &c.

**PITKIN BROTHERS.**

Louisville, Ky., Sept. 1856.

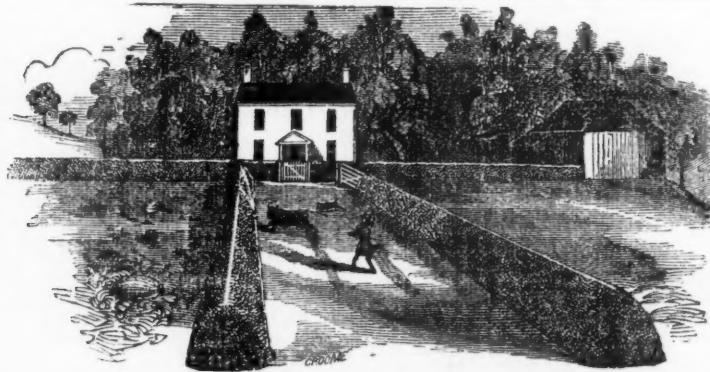
**LATOURETTE & WYMAN,**

MANUFACTURERS OF

**LINSEED AND CASTOR OILS.**

OFFICE AND WORKS, Corner of Second & Columbia Sts.  
SAINT LOUIS, MISSOURI.

Cash paid for Flaxseed and Castor Beans.



### HEDGE FENCES.

**LOGAN SLEEPER, BRIDGETON, St. Louis county Mo.,** will attend to all calls for Setting or  
completely Growing **HEDGE FENCE** in St. Louis and St. Charles counties, and in Central and Southern Illinois.  
Gives prompt attention to orders from all places, near and distant.

Osage Orange Seed and Plants, good and fresh, always on hand. Printed Instructions accompany them when  
desired. Plants can be sent any distance, and set with safety any time during the three months of April, May  
and June, and in the fall, from the time of the first frost till the ground freezes.

Oct. '56